Mediadent User manual 20120213

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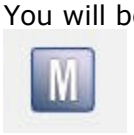
1 Welcome page

Mediadent is an **imaging** software for dental and maxillo-facial diagnostic. It captures, displays and saves digital images from x-ray units, intraoral or extraoral dental cameras, digital cameras and images acquired by digitizing film with a scanner in order to help a dentist to diagnose the dental health of a patient.

The Mediadent imaging module is always integrated in a **Patient Management System (PMS)** such as Baltes, DentAdmin, ...

You will be able to launch Mediadent via the PMS system by clicking on the Mediadent icon



We recommend that you follow the 'Getting Started' module to get a good overview of the most common tasks.

1. Getting Started

First time users can go to the 'Getting Started' section. Here you will find an overview of common used functions in Mediadent.

It's a great starting point...

Getting Started (Section 2)

2. Step by Step

Follow these steps and learn how to acquire and image, manipulate the image, print and save the image.

1. **Acquisition of an image (Section 2.2)**
2. **Working with images (Section 3.2)**
3. **Saving and Printing ('Saving and Printing' in the on-line documentation)**

3. How to

The **'How to'** section will offer a number of tips and tricks on how to use Mediadent.

How to (Section 4.1)

4. Help

In this section you will read how to get support.

Getting support (Section 10)

(Section 2)

(Section 2)

(Section 2)

2 Getting Started

Before you start using the Mediadent software it's important to understand the different **screen elements** and the way you can **navigate** through the different options.

After you are acquainted with the screen elements you can follow the steps to **acquire** an image.

The basic **manipulations** of an image can be helpful if you need analyze the image for diagnostic purposes.

There are several ways to **share** your images with colleagues or other systems.

Step by Step guidance

1. **Overview screen elements (Section 2.1)**
2. **Acquiring an image (Section 2.2)**
3. **Basic manipulations of an image (Section 2.3)**
4. **Saving the image (Section 2.4)**
5. **Printing the image (Section 2.5)**
6. **Sending the image by e-mail (Section 4.6.1)**

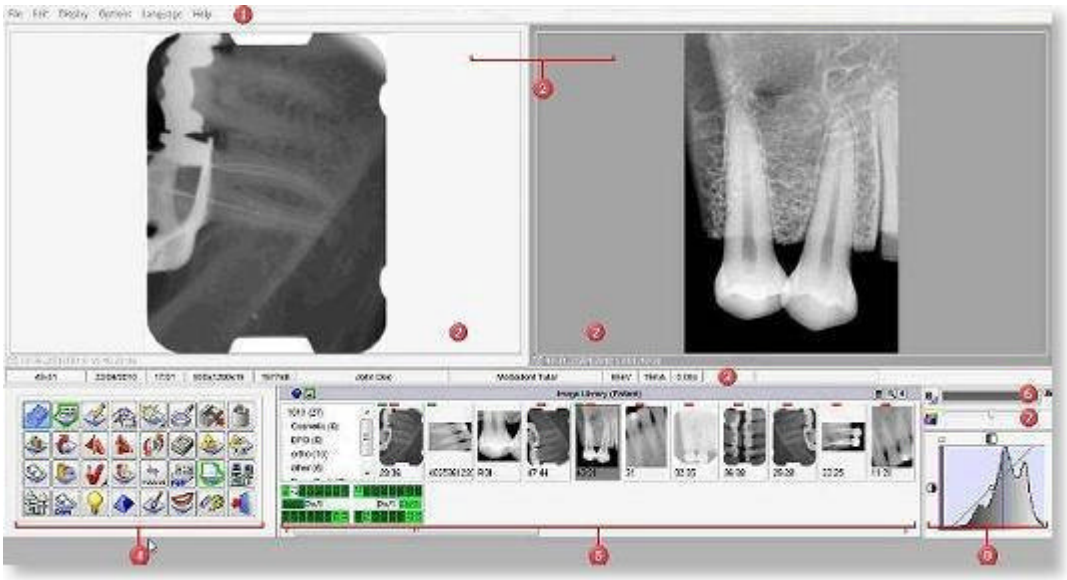
2.1 Overview of the Mediadent screen elements

You will **launch** Mediadent through your **Patient Management System** (PMS). Mediadent will receive its patients information (name, ...) from the Patient Management System.

In this article we will give an **overview of the different Mediadent screen elements** and there function.

It's a good start to getting to know Mediadent better.

Once you have launched Mediadent can get the following screen:



1	The numbers indicate the Mediadent version you are using at the moment. Preferably you are using V6. This is the latest version and will give you the richest experience.
2	These are the different options in the menu. In most of the cases the options are also available through the **Iconset**.
3	These boxes on the screen are called **Viewports**. You can activate a **Viewport** and load a patients image. For analysis and diagnoses purposes you can have up to **5 Viewports** on your screen. This means you can compare up to 5 images of the same patient. Explore the possibilities of the Viewports in the article **Working with Viewports (Section 3.1.3)** .
4	This is the **Status Bar**, it will show you the patient's name and practitioners' name.
5	The **Iconset** allows you to quickly access certain functionality. Clicking on an icon will get you to the desired functionality.
6	The **Imaging library** contains all the images from a particular patient. The patient information can be read on the **Status bar**. You can also see the images of the patient in the Status Mount. See Also **Working with the Image library** (Section 3.5.3).
7	The **Windowing** slider is one of the most powerful features of Mediadent®. It allows you to **limit** the number of gray scales in your image. See Also **Working with Windowing (Section 3.2.2)** .
8	The **Pseudo Color** slider allows you to convert the gray scales from the image into pseudo colors. See Also **Working with Pseudo Colors** (Section 3.2.3).
9	The **Histogram** of the image represents the distribution of the pixels. It shows the amount of pixels per gray scale. You will be able to improve the images. See Also **Basic manipulation of an image (Section 2.3)** .

At the **bottom** of the screen you will see a bar :

The bar indicates how much **disk space** is in use. If the bar is **green**, you have enough room to store the images. An **orange** or **red** bar indicates that it is time to look for an extension of your hard disk/server.

2.2 Acquiring an image

One of the unique capabilities of Mediadent is that it supports most of the world leading **X-Ray devices** and video devices. To get an **overview** of the supported devices, go to our web site **www.imagelevel.com (http://www.imagelevel.com/)**.

It is important to understand that the **acquisition screen** may **differ** depending on the device that is used. Often a device specific acquisition screen is launched, follow the instructions offered by the supplier.

In the **screen shots** we will use an **'X-Ray Demo sensor'** as an example. You can also use the X-Ray Demo sensor to practice.

When you want to make an acquisition you first need to **activate** the correct device, then you go to the **acquisition** screen. After you are finished acquiring the images for the patient you can s**ave** the image.

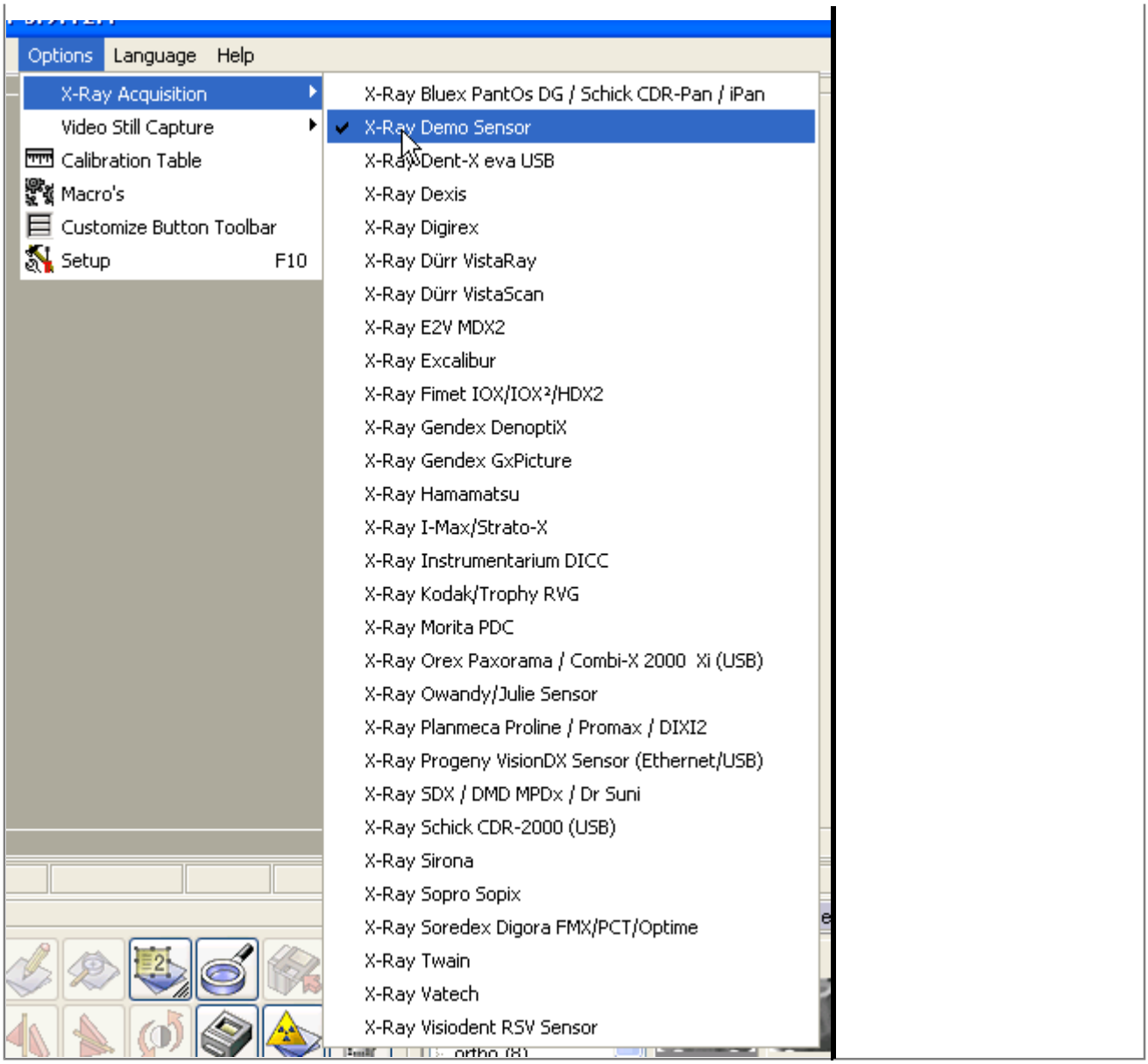
This section will explain the steps to acquire an image:

1. Check the active device

Before you can take an image you need to **check** if the correct device is selected. Once this is selected, you will be able to take a picture with that device.

You don't have to check it every time you want to take an acquisition. Once the correct device is selected it will stay active.

Action	Explanation
In the Mediadent Menu, choose ***Options*** > ***X-Ray Acquisition***	Within the ***Options > X-Ray Acquisition*** list you will find the supported devices in Mediadent. Please make sure to select **your** acquisition device. It is possible you only see a limited list of devices. This depends on the **Modules** that have been installed. In the **Mediadent Setup section (Section 7.1)** you will learn more about the Modules that can be activated.

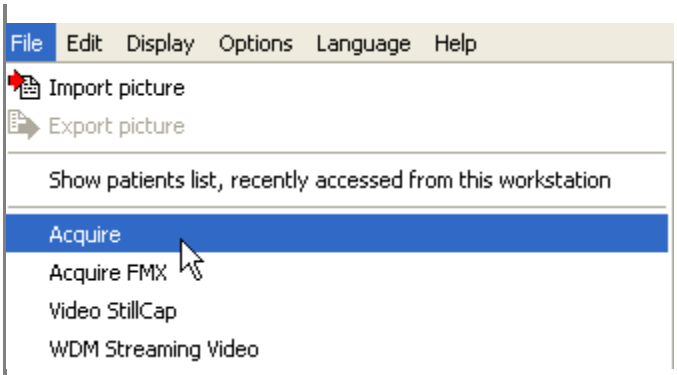


If you have more than 1 device to take images. You can create a **macro** that will allow you to automatically select one of the devices.

See Also **How to create a macro (Section 4.7.1)**.

2. Acquire an image

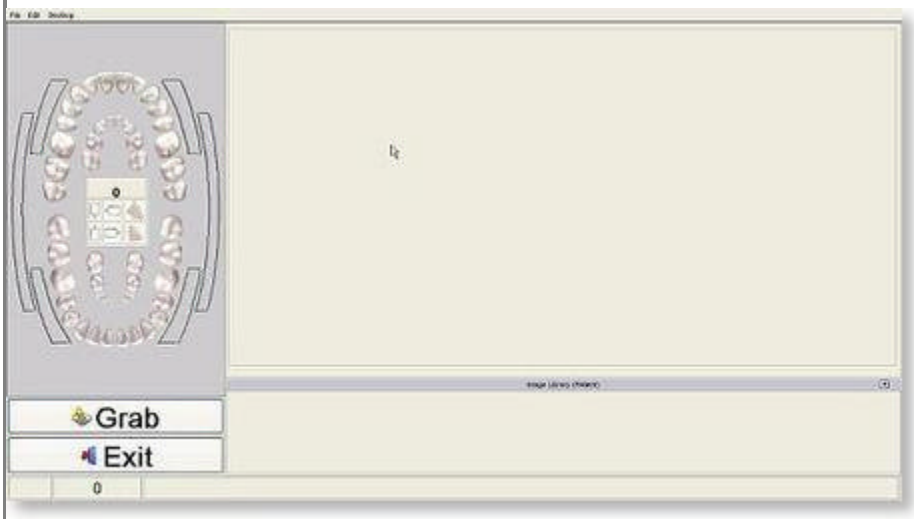
Action	Explanation
1. In the Mediadent Menu choose ***File***>***Acquire***	You can choose to use the Menu of Mediadent.



-or-

In the **Iconset** click on the icon

In the standard Mediadent Desktop you will see the Iconset in the **bottom left corner**.



The **teeth scheme (Status)** is presented.

You can now select the tooth/teeth you want to take an image of.

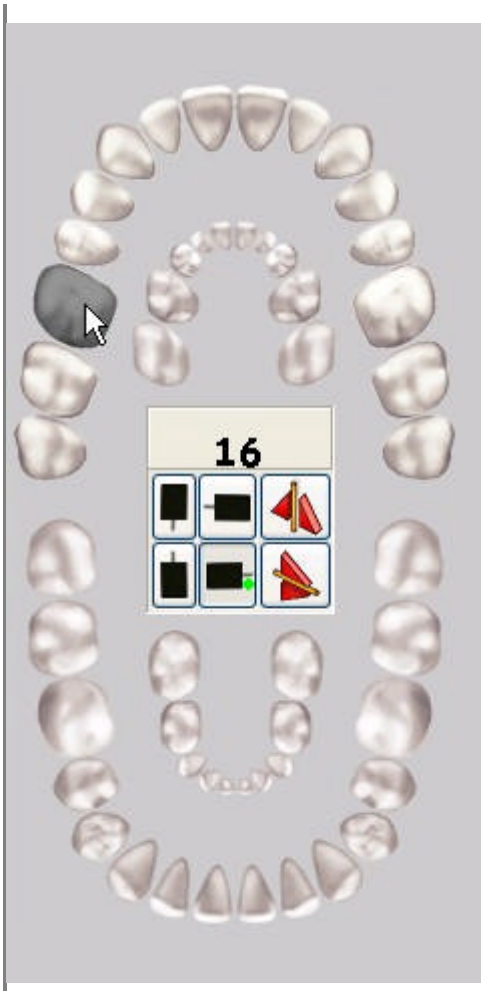
This screen can be different. It depends on the acquisition device you use. In this example we use the **X-Ray Demo Sensor**.

It will also depend on the Desktop that has been selected. Read more about the Desktop in Mediadent in the following article **A desktop (Section 9.2)**.

2. ***Select*** the teeth or tooth you want to make an acquisition for.
You also have the possibility to a select a **Bitewing**.

You also have the possibility to a select **Bitewing**.

To learn the different possibilities of the



teeth scheme, read the article **Working with the teeth scheme (Section 3.3.1)**.

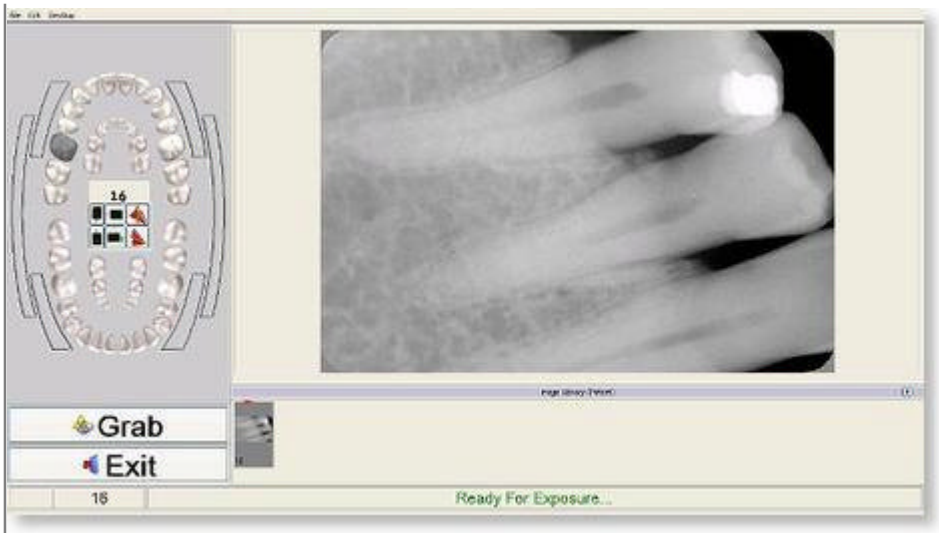
Once you have selected the correct tooth/teeth or Bitewing you are ready to take the picture.

Don't forget to position the **patient** or the **object** you want to take an image of before clicking the Grab button.

3. You can **Grab** the image by clicking on the Grab button in the image acquisition screen.

.

The image will appear in the **Viewport** and in the **Image library**.



4. When finished click the **Exit** button. 	When you click on the Exit button you will be prompted to **save** the images.

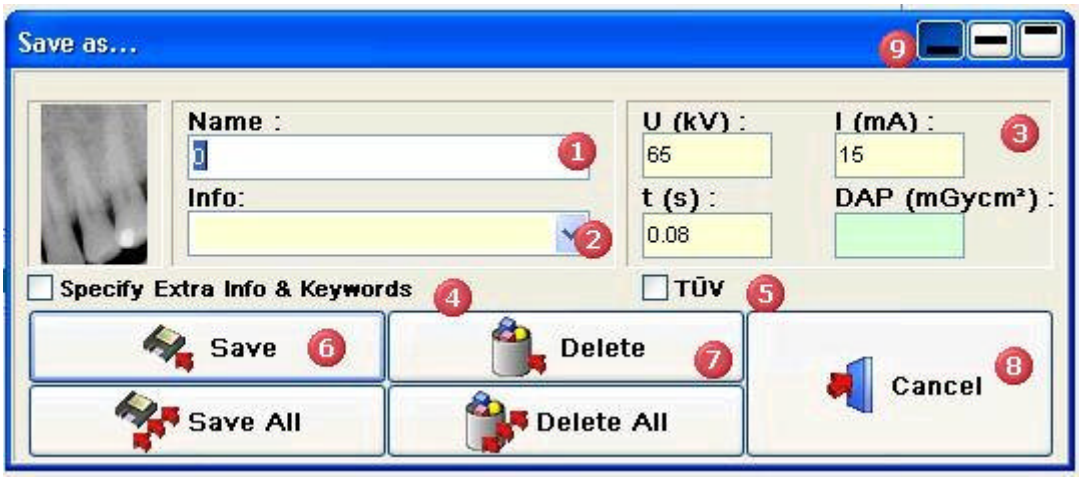
3. Save an image

When you have made an **acquisition** and you quit the acquisition screen you will be presented with a dialog box to **save the images.**

In this dialog box you also get the possibility to add **additional information** for later reference.

You can add:

- Name of the image
- Info : extra information about the image
- Settings : U (kV), I(mA), t(s), DAP
- TÜV : This is optional and can be configured not to appear in the Save as ... dialog box. **Contact us for more information (Section 10)**.
- To organize your images specify extra information and keywords.



1	Name of the image.
2	Extra information for later reference.
3	Measures : pure for your information, this will not have an impact on the image or device.
4	You can add extra info and keywords to your image for later reference. See Also **Working with the Image Library (Section 3.5.3)** and **Specify Extra Info & Keywords (Section 3.5.2)**.
5	Setting TUV : When this is ticked your image will be locked and can no longer be changed/saved. In some countries you have to make reference images that may not be changed afterwards.
6	Save and Save All the pictures to the Image library.
7	Delete and Delete All the pictures in the Image library.
8	Quit the screen
9	Choose to change the position of the dialogue box = bottom, middle or top of the screen.

To save an image you give the image a name and fill in the extra information fields click on the ***Save*** button.

It is however very practical to work with the **Status Mount**. This will allow you to save time because the name of the images will be automatically filled (tooth/teeth number) based on the association made in the Status Mount. Learn more about how to work with the Status Mount in the topic : **Working with the Status Mount. (Section 3.4.1)**

It is possible that your acquisition process has been automated.

In some practices there is more than 1 acquisition device, for example a device for panoramic and cephalometric images and another device for intra-oral images.

In Mediadent it is possible to automate the acquisition process and to use **function keys** or **icons** in the Icon set to trigger the correct device for a particular picture.

An description of **how to automate the acquisition process** can be found in the topic **How to create a macro (Section 4.7.1)**.

2.3 Working with images

Mediadent offers a wide range of **tools** to **manipulate** your images so they can help you with your diagnoses.

Often the raw image is of a poor quality, maybe images are too light or too dark.

It can also be practical to zoom into a particular area of the image for detailed analysis.

This article will explain the **basic manipulations of images**.

But first things first, **load an image into a Viewport** and find out what the possibilities are!

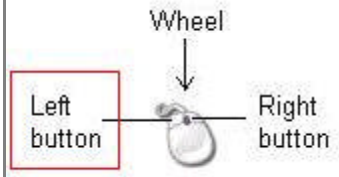
1. Manipulation of the image by using the mouse

Action	Result
LEFT mouse button	- Go to **full** screen mode - Change the **brightness** and **contrast** of the image.

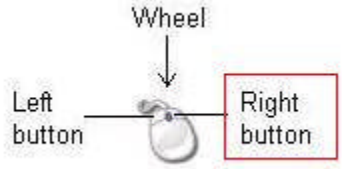
2.3.1 1. Full Screen View of an image

By ***double clicking*** with your ***left mouse button*** on the image, you will see the image full screen. To go back, just ***double click*** again and you will return to the Mediadent screen.	For detailed analysis you can view the image full screen.

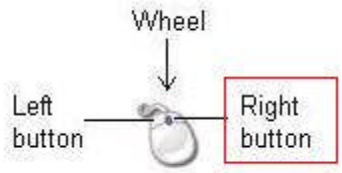
2.3.2 2. Change contrast and brightness

Press and hold the ***LEFT*** mouse button and move the cursor on the image : up and down, left to right. 	If you picture if of a bad quality you can quickly change the contrast and/or brightness.
RIGHT mouse button	- Activate the **magnification frame** - Change the **magnification** within the magnification frame

2.3.3 3. Magnify a part of the image

Press and hold the ***RIGHT mouse button*** to use the **magnification frame.** You can **move** the cursor while pressing and holding the right mouse button so you can go to a particular area you want to analyse in more detail.  	For detailed analysis of a certain problem area you can activate the **magnification frame**. The magnification frame will appear if you **press and hold the right mouse button.**

2.3.4 4. Change the magnification within the magnification frame

Press and hold the ***RIGHT mouse button*** to use the **magnification frame.** While **pressing and holding the RIGHT mouse button** you can turn the **wheel the mouse** up and down.  	Sometimes the magnification in the magnification frame is not enough. You can zoom in or out in the magnification frame. This will allow you to do a detailed analysis of the patient's problem. If you want to change the magnification within the magnification frame, you can turn the **wheel** of the mouse up and down while **pressing and holding the RIGHT** mouse button.

2. Manipulating images by using the Windowing

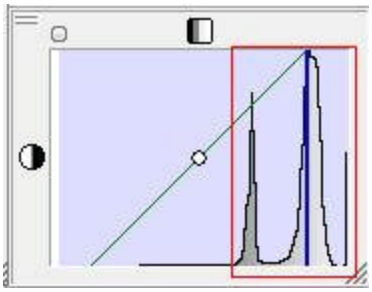
The **Windows function** is a very powerful feature in Mediadent.

- It will allow you to **improve** the quality of your image with 1 mouse click (automatic windowing, described in the article).
- It will allow you to **modify** the images that are of a **lesser quality**, too bright or too dark.

The **Windowing feature** will allow you to **filter** out the gray scales that are not relevant .

The **histogram** shows the retribution of the gray scales of an image.

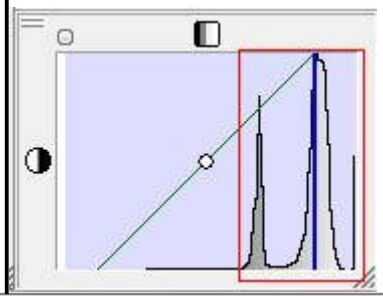
For example: If an image is **too bright** you will see that the histogram shows spikes on the right hand side of the chart.



This screenshot shows spikes on the right hand side, indicating that the image is too bright.

When activating the Windowing feature, the **gray scales** on the left hand side of the histogram are not relevant and can be discarded.

In this **example** the image is very bright as a result of too little exposure time.

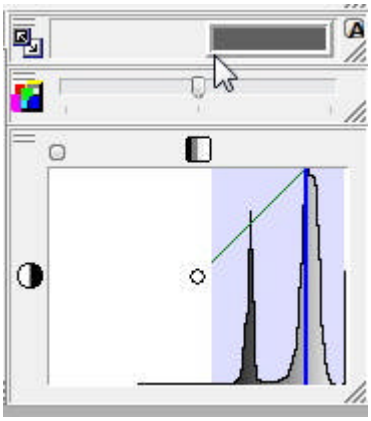
To get a better picture quality, we will use the **Windowing** ruler.	The **Windowing ruler** and the **histogram** work together.
	

In this section you we will cover the following topics :

- **1. Use the Windows slider**

In this example we will slide the Windowing ruler to the **right**, because the histogram indicates that there are relevant gray scales.

To slide ***PRESS*** and ***HOLD*** the **left mouse button** while dragging the slider to the **right**.

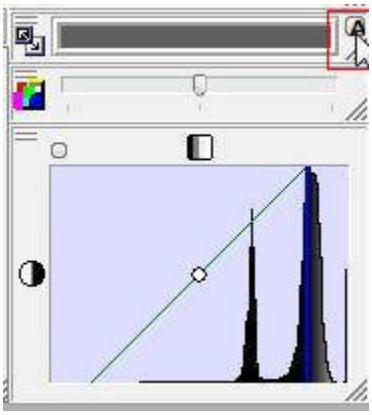


You will see the image changing on the fly.

2. Use the automatic Windowing

We have made it even easier for you with the **automatic Windowing feature**.

Press the **icon** on the right hand side of the Windows ruler and Mediadent will **automatically filter** out the most relevant gray scales.



3. Reset the image

You can **reset** your changes by clicking on the small icon on the left hand side of the Windowing ruler.

You will see the image revert to the original state.

4. Save the modified image

Once you have modified the image via the Windowing feature, you can **Save the image.**

1. Click on the ***Save icon***	.
2. ***Save*** as a New Image	Choose **YES** if you want to keep the original version of the image. Choose **NO** if you want to replace the original version. We will choose to save the image as a new image. This means a new file will be created.
3. Give a name to the file	If you have chosen **YES**, you will be prompted for a name.
4. Click on the ***Save*** button	.
	The image will appear in the Image Library.

In this screenshot you see the difference between 2 images. The **left** image is the modified image with the Windowing feature, the **right** image is the original image.

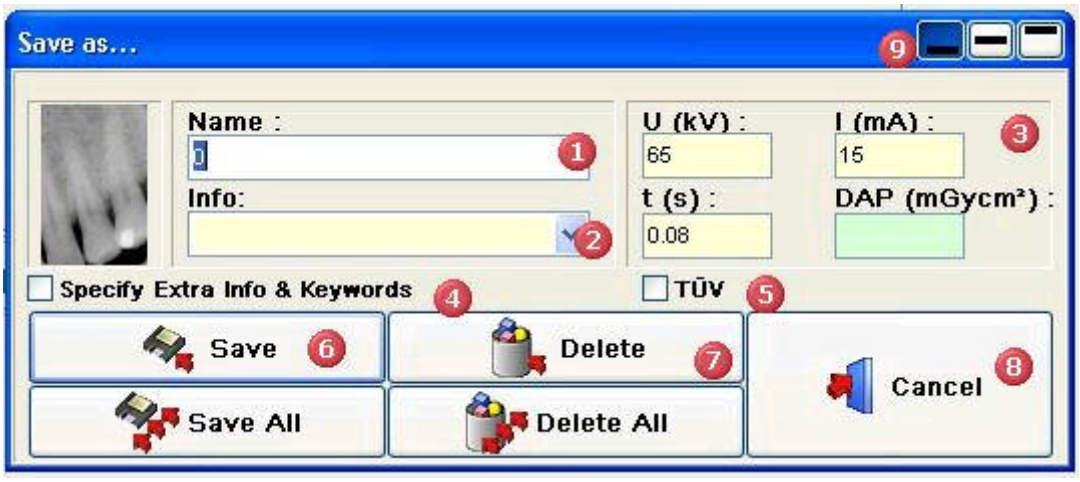
2.4 Saving an image

When you have made an **acquisition** and you quit the acquisition screen you will be presented with a dialog box to **save the images.**

In this dialog box you also get the possibility to add **additional information** for later reference.

You can add:

- Name of the image
- Info : extra information about the image
- Settings : U (kV), I(mA), t(s), DAP
- TÜV : This is optional and can be configured not to appear in the Save as ... dialog box. **Contact us for more information (Section 10)**.
- To organize your images specify extra information and keywords.



1	Name of the image.
2	Extra information for later reference.
3	Measures : pure for your information, this will not have an impact on the image or device.
4	You can add extra info and keywords to your image for later reference. See Also **Working with the Image Library (Section 3.5.3)** and **Specify Extra Info & Keywords (Section 3.5.2)**.
5	Setting TUV : When this is ticked your image will be locked and can no longer be changed/saved. In some countries you have to make reference images that may not be changed afterwards.
6	Save and Save All the pictures to the Image library.
7	Delete and Delete All the pictures in the Image library.
8	Quit the screen
9	Choose to change the position of the dialogue box = bottom, middle or top of the screen.

To save an image you give the image a name and fill in the extra information fields click on the ***Save*** button.

It is however very practical to work with the **Status Mount**. This will allow you to save time because the name of the images will be automatically filled (tooth/teeth number) based on the association made in the Status Mount. Learn more about how to work with the Status Mount in the topic : **Working with the Status Mount. (Section 3.4.1)**

2.5 Printing images

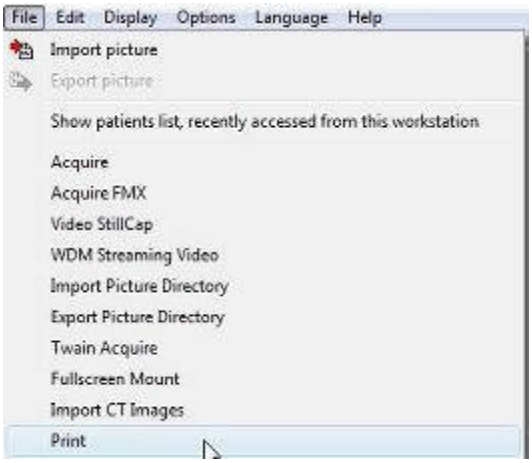
Printing images is one of the easiest ways to share images with your colleagues or your patients.

In Mediadent you have to:

1. Choose the **patient** you want to print images for
2. Choose the ***print icon*** in the iconset

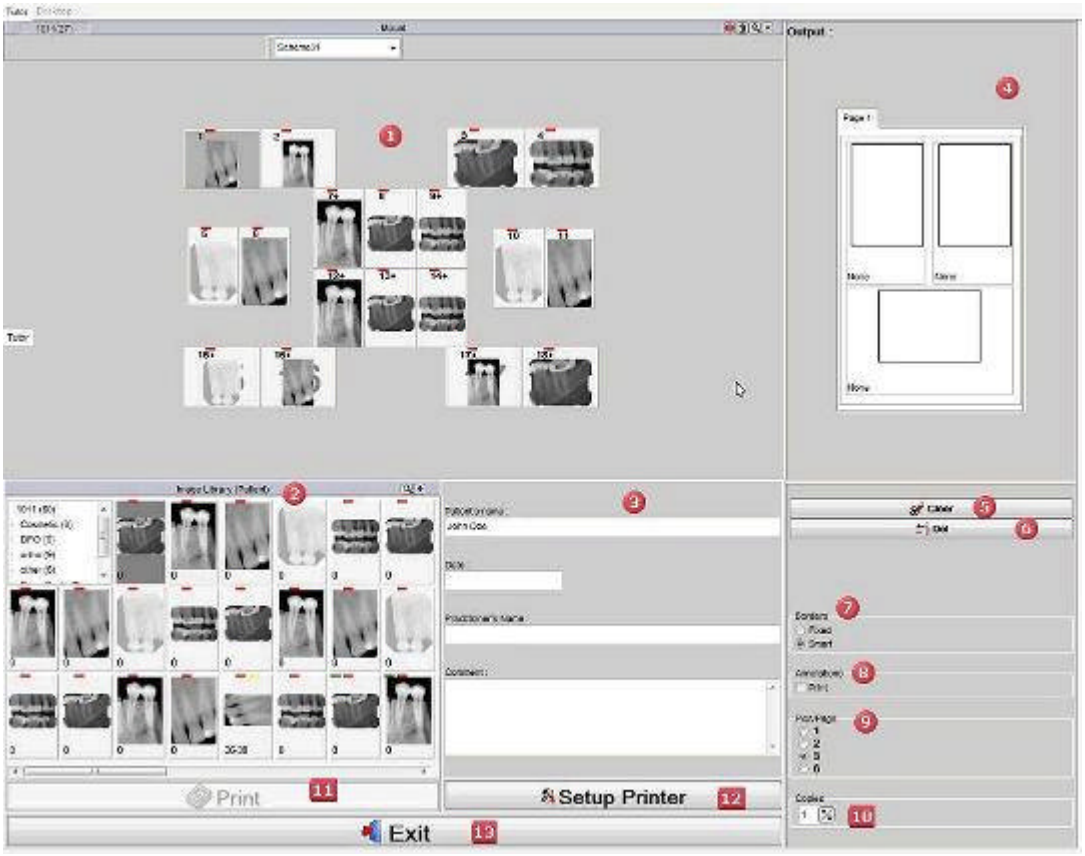
- or-

Choose in the Mediadent menu ***File>Print***

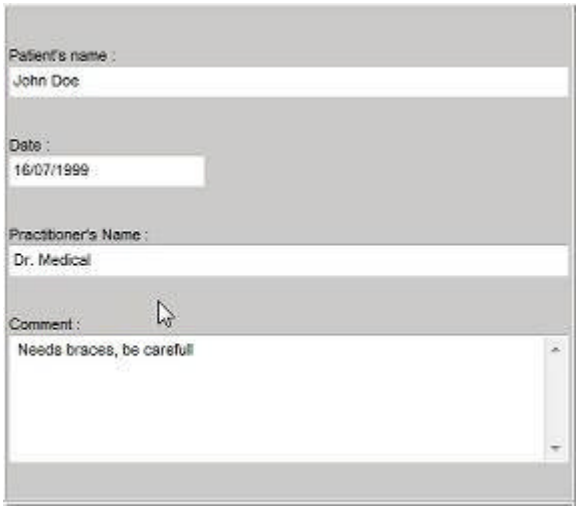
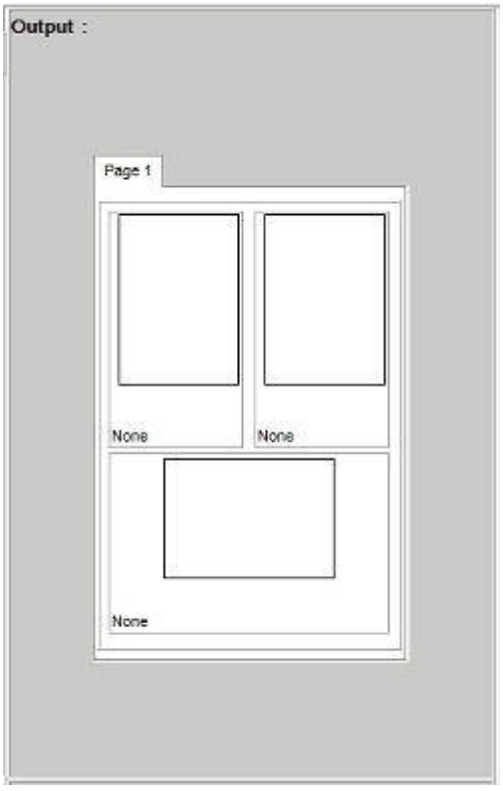


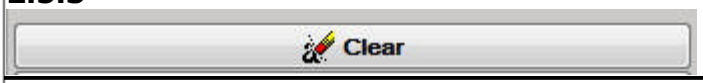
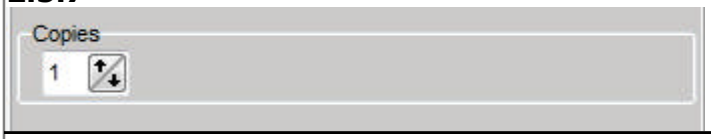
1. Overview Print module

Depending on the Desktop that has been selected, you will see the images of this patient in the Status mount and in the Patient's Library.



Screen elements	
1 Status Mount	Will show the images in the **Status mount**.
	All the images taken from this patient

2 Image Library	will be organized in his **library**. You will see the subfolders. Select one of the subfolders if you want to print one of the images. The Status mount and Image Library are different ways of organizing the patient's images. In the print module you will see both and you can choose your images from both Libraries.
3 Additional fields you can customize  **2.5.1**	You will be able to change the patient's name, date and practitioner's name. If you want you can add some additional comments.
4 Output screen  **2.5.2**	This part will show the **layout of the images** on the paper. In this example you see that 3 images will be printed out. Just double-click on an image and it will appear in one of the boxes of the Output screen. In this example we have the possibility to add 3 images on 1 page. This can be changed by adapting the number of images per page (Pics/Page) 9 option.

5 Clear button **2.5.3** 	The ***Clear*** button will clear **all the images** on the page
6 Del button **2.5.4** 	The ***Del*** Button will **delete the image** that is selected on the Output screen.
7 Borders	Fixed Smart
8 Annotation **2.5.5** 	When you select this option, the **annotations** will be printed onto the image
9 Pics/Page **2.5.6** 	The Pics/Page will allow you to choose the **number of images** per page (1,2,3 or 6 images).
10 Copies **2.5.7** 	Select the **number of copies** you want to print
11 Print button	The ***print*** button will print to your primary printer.
12 Setup Printer	If you want to **change the printer setup,** for example change the paper size or orientation, you can select the 'Setup Printer' button.
13 Exit	The ***Exit*** button will exit the print module.

2. Selecting images to print

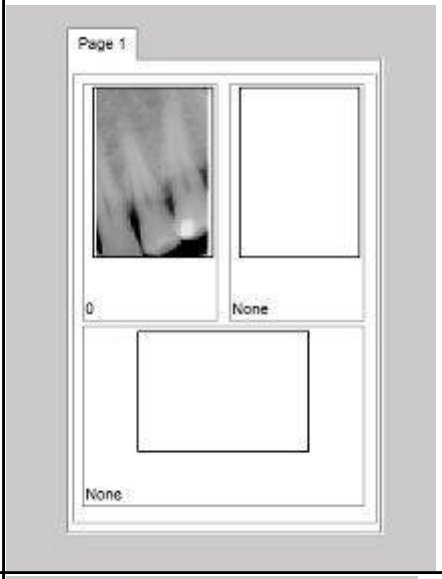
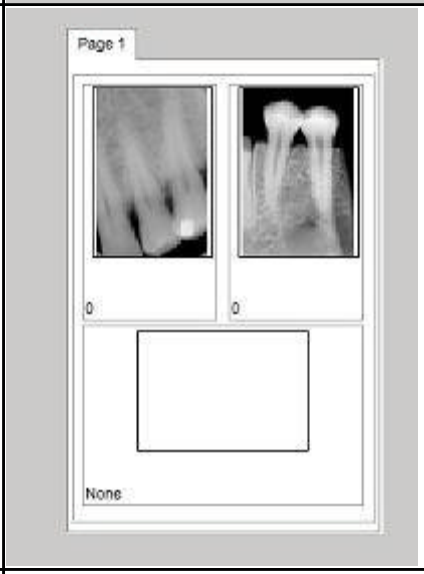
If you want to **print** an image, just ***double-click*** on it and it will appear in the Output screen.

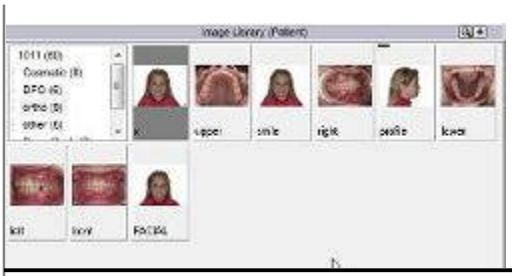
The name of the image will appear as a caption on the page.

First select the number of images you want to print on a page **BEFORE** selecting the images.

If you first select the images and then change the number of pictures per page, you will lose your selected images.

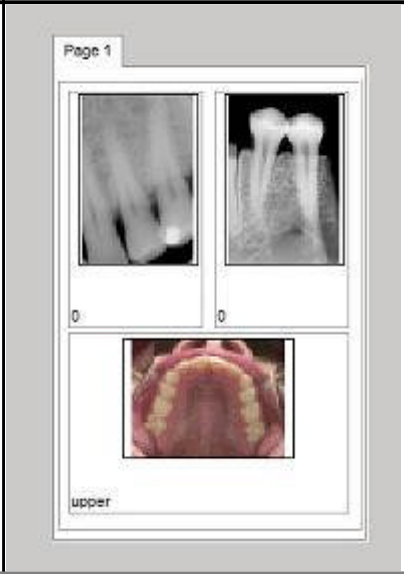
In this **example** we will explain how you can easily select pictures from the **Image Library** in the different subfolders and combine them with pictures out of the **Status Mount**.

Action	Explanation and result
1. ***Double click*** on a picture out of the **Status Mount** 	By double-clicking on the picture, it will be **loaded** into the output screen. 
2. ***Double-click*** on another image. 	
3. ***Click*** on the **'ortho'** subfolder in the Image Library.	



Select another subfolder, for example the **'ortho folder'**.

4. ***Double click*** on an image in the 'ortho' folder.



With the extra **Reporter module** you can create standard documents such as referral documents and add the patient's images and information to them. For more information, read the topic **Working with the reporter module (Section 3.6.1)**.

If you have problems **viewing** all these elements on the screen, you might want to consider choosing another Desktop that is better suited for your screen. Read the topic on **Loading another desktop (Section 4.2.7)**.

3 Working with

3.1 Working with the Mediadent screen

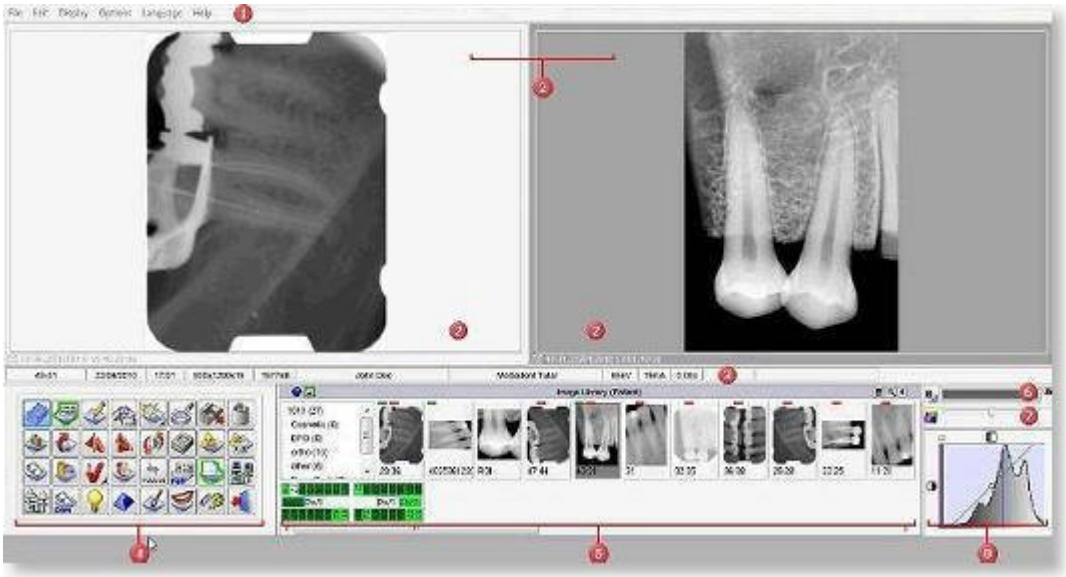
3.1.1 Overview of the Mediadent screen elements

You will **launch** Mediadent through your **Patient Management System** (PMS). Mediadent will receive its patients information (name, ...) from the Patient Management System.

In this article we will give an **overview of the different Mediadent screen elements** and there function.

It's a good start to getting to know Mediadent better.

Once you have launched Mediadent can get the following screen:



1	The numbers indicate the Mediadent version you are using at the moment. Preferably you are using V6. This is the latest version and will give you the richest experience.
2	These are the different options in the menu. In most of the cases the options are also available through the **Iconset**.
3	These boxes on the screen are called **Viewports**. You can activate a **Viewport** and load a patients image. For analysis and diagnoses purposes you can have up to **5 Viewports** on your screen. This means you can compare up to 5 images of the same patient. Explore the possibilities of the Viewports in the article **Working with Viewports (Section 3.1.3)** .
4	This is the **Status Bar**, it will show you the patient's name and practitioners' name.
5	The **Iconset** allows you to quickly access certain functionality. Clicking on an icon will get you to the desired functionality.
	The **Imaging library** contains all the images from a particular patient. The patient

6	information can be read on the **Status bar**. You can also see the images of the patient in the Status Mount. See Also **Working with the Image library** (Section 3.5.3).
7	The **Windowing** slider is one of the most powerful features of Mediadent®. It allows you to **limit** the number of gray scales in your image. See Also **Working with Windowing (Section 3.2.2)** .
8	The **Pseudo Color** slider allows you to convert the gray scales from the image into pseudo colors. See Also **Working with Pseudo Colors** (Section 3.2.3).
9	The **Histogram** of the image represents the distribution of the pixels. It shows the amount of pixels per gray scale. You will be able to improve the images. See Also **Basic manipulation of an image (Section 2.3)** .

At the **bottom** of the screen you will see a bar :

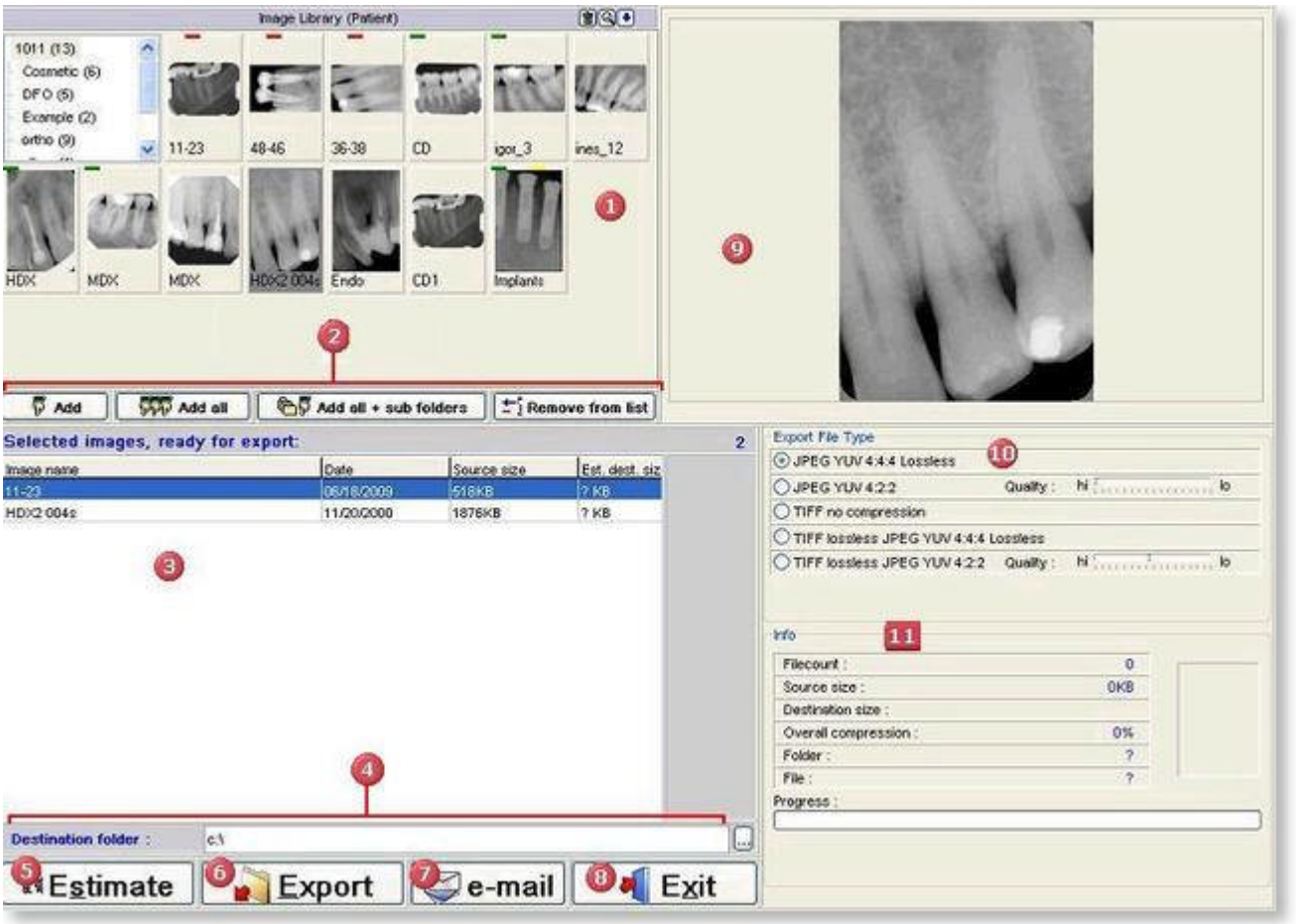
The bar indicates how much **disk space** is in use. If the bar is **green**, you have enough room to store the images. An **orange** or **red** bar indicates that it is time to look for an extension of your hard disk/server.

3.1.2 Overview of the export picture directory screen

The Export Picture Directory screen

The Export Picture Directory screen is the dialog box used to select the images that need to be **exported** in a specific format and to a particular folder (Destination folder).

This option is also used to sent images via **e-mail**.



1	The Patient Image Library showing the images taken for the selected patient.
2	The buttons to add the images to the **export list** 3 - ***Add button*** : **Select** the picture and click the **Add** or click with the **RIGHT** mouse button on an image. - ***Add all button*** : Will add all the pictures from **selected folder** in the Patient Image Library. - ***Add all + sub folders*** : Will add **all the pictures** from the Patient Image Library (including the images in the sub folders). - ***Remove from list*** : Will **remove** the selected image from the export list.
3	The **export list** contains the selected images that you want to **export** or sent by **e-mail**.
4	The **Destination folder** is the folder you will **export** your files to. ***Click*** on and browse to the destination folder.
5	The ***Estimate button*** is practical because it will calculate the number of files, the source size, the destination size, the compression, folder and file of the images that will be exported or e-mailed. This information will be shown in the **Info box** 11.
6	The ***Export*** button will actually export the images to the **Destination folder**.
7	The ***e-mail*** button will launch your **e-mail program** and **attach** the images to a new e-mail message. You only need to add the names of the recipients and the images will be sent.

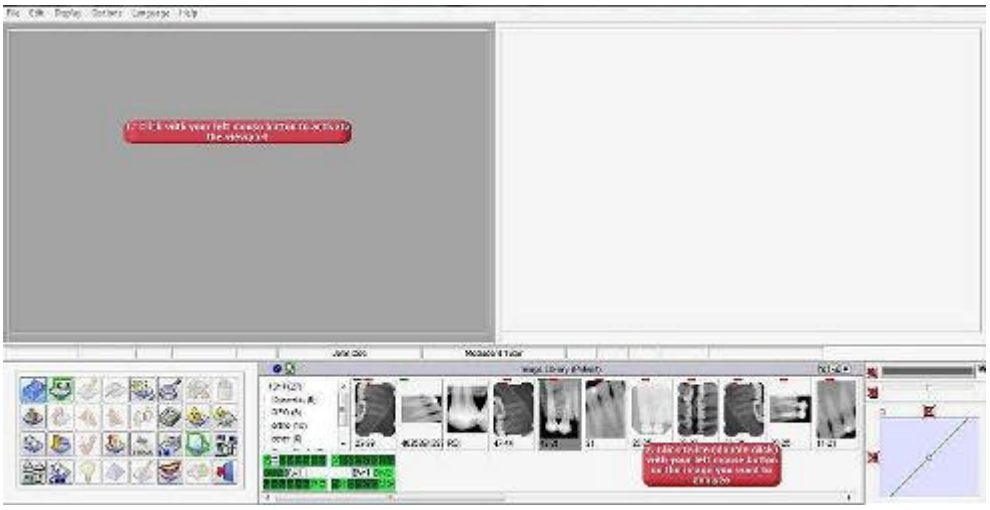
8	The ***Exit*** button will close the dialog box. ⚠ **Do not Exit** before all the files have been exported since this will break off the export procedure.
9	The **Viewport** will allow you to view the images before selecting them to be exported or sent by e-mail. ***Double click*** on the image and it will be loaded into the Viewport.
10	The **Export File Type** box will allow you to choose the file type you want the files to export to.
11	The **Info box** will give you interesting information such as the number of files, the source size, the destination size, the compression, folder and file of the images that will be exported or e-mailed. The **green bar** at the bottom of the Info box will also show the progress of the export.

3.1.3 Working with viewports

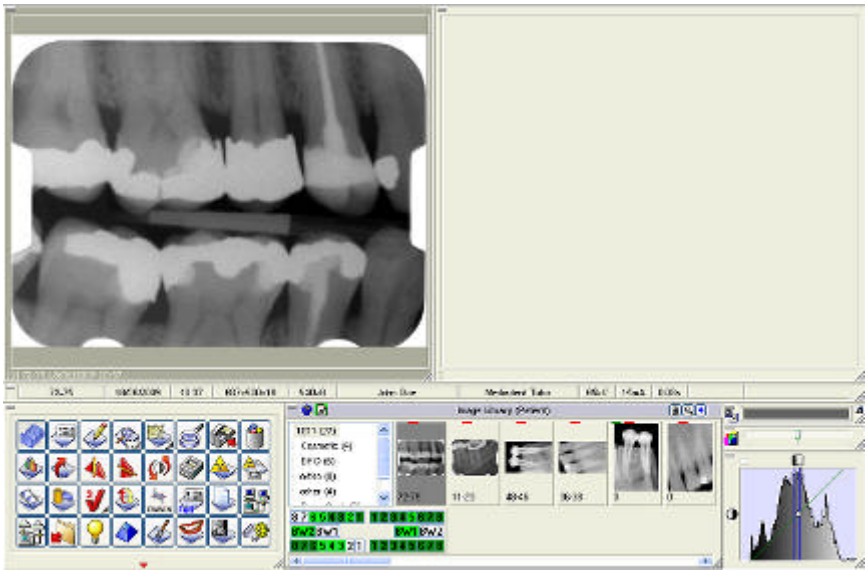
In this article we will explain how to load an image in a Viewport.

1. To load an image in a **Viewport**, you first have to **activate** the Viewport by clicking with your **left mouse** button in the Viewport area 1.

You will see the Viewport changing into **dark grey**. This is an indication that the Viewport is selected.



2. Then you need to **double click** on the image in the **image library** 2 and the image will be loaded in the selected Viewport.



The image is now ready for analysis.

3.1.4 Working with desktops

In this article we will explain what the **Mediadent Desktop** is, how you can load another Desktop to better suit your needs.

For the more advanced users, we will explain how to **configure** a new Desktop.

You also have the possibility to **delete** a Desktop you have created.

We will explain the following topics:

1. Overview of the Mediadent Desktop

A **Desktop** is the way in which the **different screen elements** like Viewports, Icon set, Image Library, ... are presented on your screen.

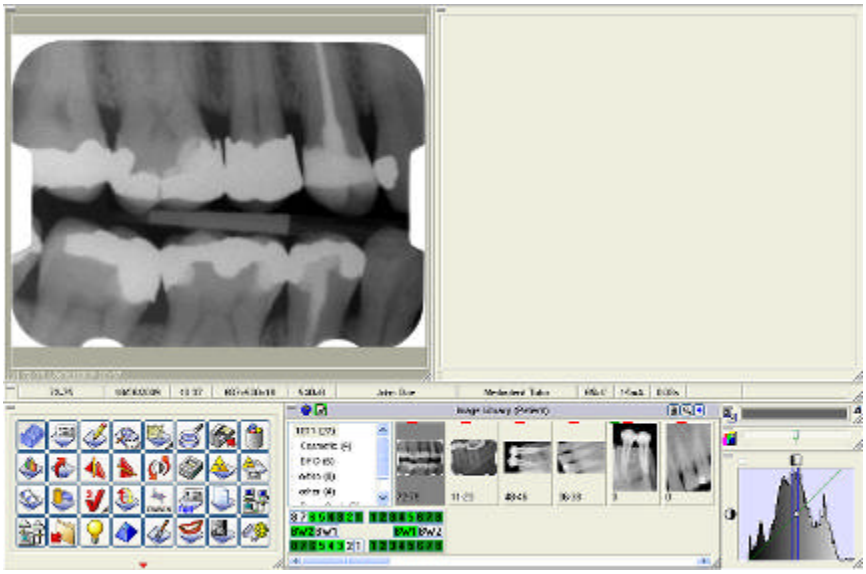
The Desktop will determine :

- How many **Viewports** A **Viewport** is a region where you can load an **image** into for analysis purposes. Loading an image can be done by first **activating** the Viewport. To activate a Viewport you have to select it by clicking in the region with your left mouse button. Once the Viewport is activated you will see that it changes color (dark grey). Now you can **double click** on the image and it will be loaded into the Viewport. are visible.
- What the position is of the Iconset.
- Where the Image library is positioned
- If and where the histogram is positioned
- If and where the brightness/contrast bar is positioned
- What screen resolution will be used

In short it determines the look of your Desktop within Mediadent.

Read more about the **different Desktop elements** in the topic about the **screen elements (Section 2.1)**.

Example of one of the standard Mediadent Desktops :



Important to understand is that the Desktop is also tied to the **resolution** of your screen. When changing the screen or screen resolution it may be necessary to load another Desktop or to create your own Desktop.

2. Loading another Desktop

The desktop that is loaded is the **Mediadent screen layout** that has been configured for your monitor size and resolution.

It will show all the different Mediadent screen elements.

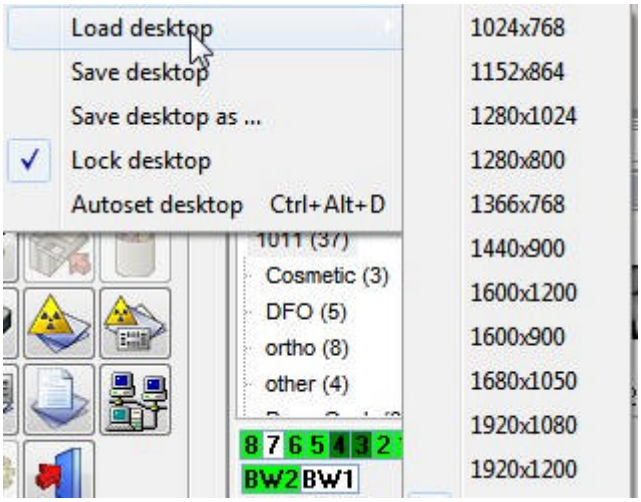
To get a better understanding of the desktop, read the article **A desktop (Section 9.2)**.

If you are not happy with the current Mediadent screen configuration, you can load **another desktop**.

Be aware that if you load a desktop that does not fit your monitor, some Mediadent screen elements will disappear from your screen.

For example choosing a desktop that is suited for a wider monitor will have as a consequence that the Mediadent screen elements (like Windowing, Histogram, ...) on the right hand side are not shown on a monitor that is smaller.

1. Choose in the Mediadent menu ***Display > Desktop Panels > Load desktop***
2. ***Click*** on the Desktop you want to load



You will see a list of **pre-installed desktops**. The names indicated most current screen resolutions. Depending on the type of screen you have, you will be able to choose one of the desktops.

A Desktop '1024x768' means that the Mediadent Desktop will be shown on your monitor in '1024 pixels (width) x 768 pixels (hight) resolution'.

To load the **ideal desktop** suited for your monitor. You can choose the option ***Display>Desktop Panels>Autoset desktop*** in the Mediadent menu.

3. Configuring the Desktop

The **Desktop** is the way in which the different elements of the Mediadent are presented on your **screen**.

The advantage is that you can **change the layout of the different screen elements**, reflecting your way of work.

If you want to change the desktop, you will first need to know how to **activate/deactivate certain screen element**.

Once activated you **move** the screen elements or even **re-size** them to fit your needs.

To change the Desktop follow these **steps**:

1. **Activate/Deactivate** screen elements
2. **Unlock** the Desktop
3. **Move or resize** the elements
4. **Lock** the Desktop
5. **Save** the Desktop

First read the article **Overview of the Mediadent screen elements (on-line documentation)** to get a better understanding of the different screen elements.

1. Activate/deactivate Mediadent screen elements

When activating a screen element, the element will be **visible**.

To activate an element

Display > Desktop Panels > select the deactivated element

Remark : make sure the sign is in front of the option

or ***click*** on the corresponding ***icon*** in the Iconset to **activate** the element.

To deactivate an element choose

Display > Desktop Panels > select the active element

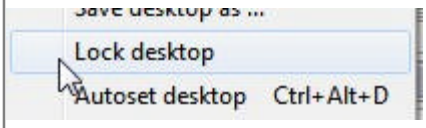
Remark : make sure the sign is **NOT** in front of the option

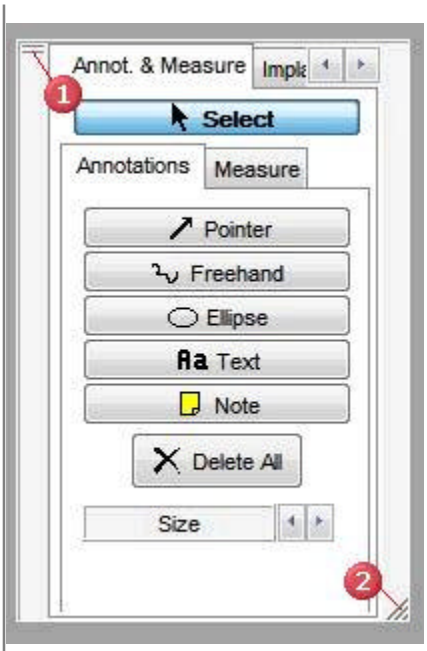
or ***click*** on the corresponding ***icon*** in the Icon set to **deactivate** the element.

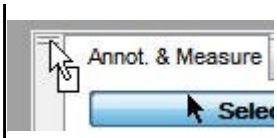
2. Change and Save the Desktop layout

Once you have chosen the screen elements you want to activate. You have the possibility to move them to another location on your screen.

Follow these steps to **change** the Desktop and to **save** it.

Action	Explanation
1. Unlock the Desktop	
1. Always **Unlock** the desktop first ***Display > Desktop Panels > Lock desktop*** 	Remark : please make sure the is not in front of the option. Always unlock the desktop before making changes. You will notice the desktop is **Unlocked** when there are **handles** available in the **left top** corner and the **right bottom** corner of the screen element. See **point 2.** for more explanation on how to use these handles.
2. Move and/or resize the Mediadent screen elements	
2. The screen elements are free and can be **moved** to another location on the screen or resized to show all the options.	**Move** the screen elements to another location by dragging and dropping the elements via the handles, situated in the **left top hand corner** of the element.





2 **Resize** the screen elements by using the handle in the **right bottom corner**.

3. Lock the Desktop

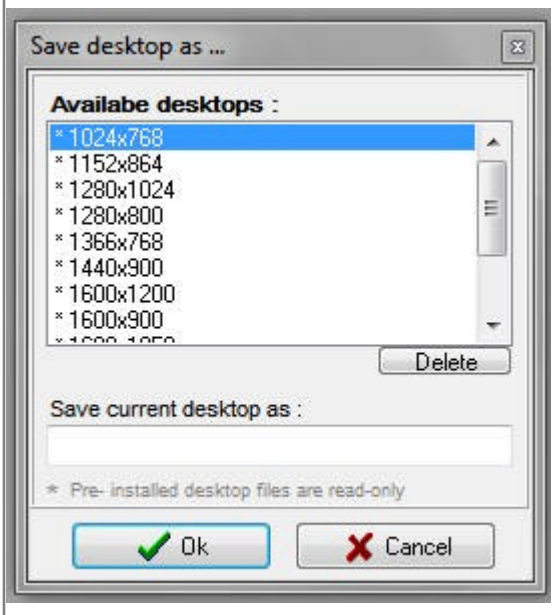
3. If you are pleased with the result, you must **lock** the desktop.

Display > Desktop Panels > Lock Desktop

Remark : the ✓ sign needs to be in front of the option in the menu.

4. Save the Desktop

Display>Desktop Panels>Save desktop as ...



You will see a list of **pre-installed desktops** (indicated with *). They cannot be changed.

After saving your desktop, you will be able to select it via ***Display > Desktop Panels>Load Desktop***

5. Type in a recognizable desktop name in the **'Save current desktop as :** ' box.

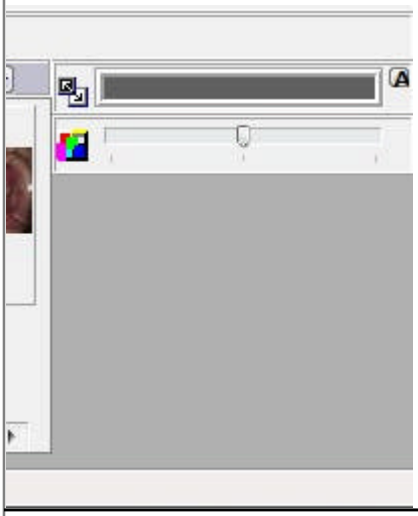
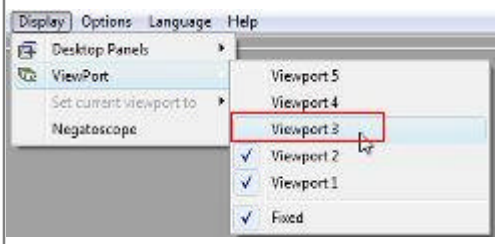
6. Click

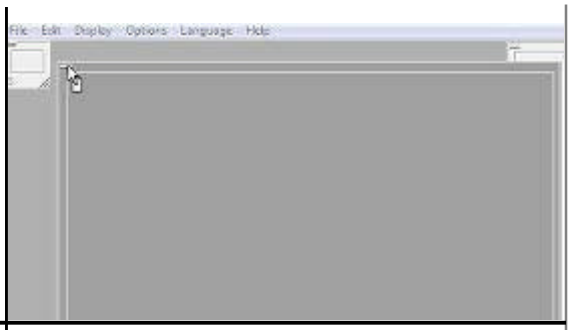
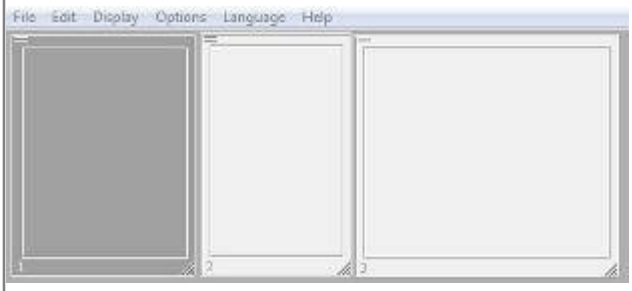
to confirm.

In the following **examples** we will show how to deactivate the **Constrast/Intensity combo** and how to **add a Viewport.**

Click on this title to view the examples

Click on this title to view the examples

Action	Explanation
As described above, **unlock** the desktop	.
We will deactivate the **Contrast/Intensity combo.** In the Mediadent menu choose ***Display > Desktop Panels >*** deselect one of the elements For example : ***Contrast/Intensity combo*** The screen element is gone. 	Remark : please make sure the is **not** in front of the Contrast/Intensity combo option.
Adding an additional **Viewport** In the Mediadent menu choose ***Display > ViewPort*** and select the Viewport you want to activate. In this **example** we would like to see **3** Viewports. 	Be aware that the Viewports that are activated will appear **under** the existing Viewports. If you desktop is Unlocked you will be able to move the Viewports to another location and you will see the **newly activated** Viewports appearing. In this **example** the Viewport 3 was under the Viewport 1. By moving the Viewport 1 you will see the Viewport 3.

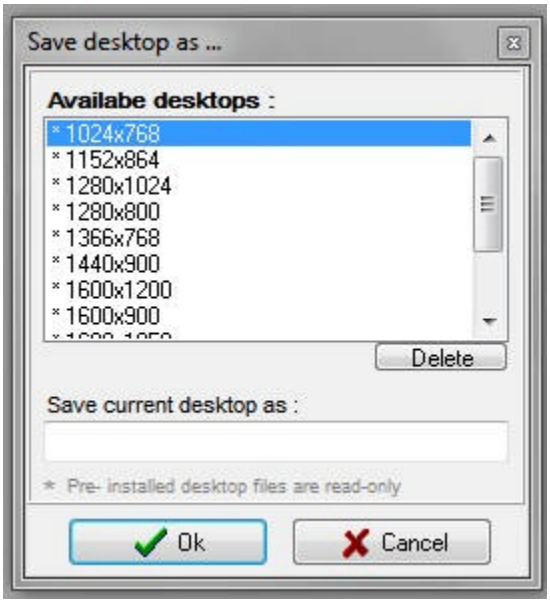
	
Position the **3 Viewports** correctly. 	.
As described earlier, **lock** the desktop and **save** it.	.

4. Deleting a Desktop

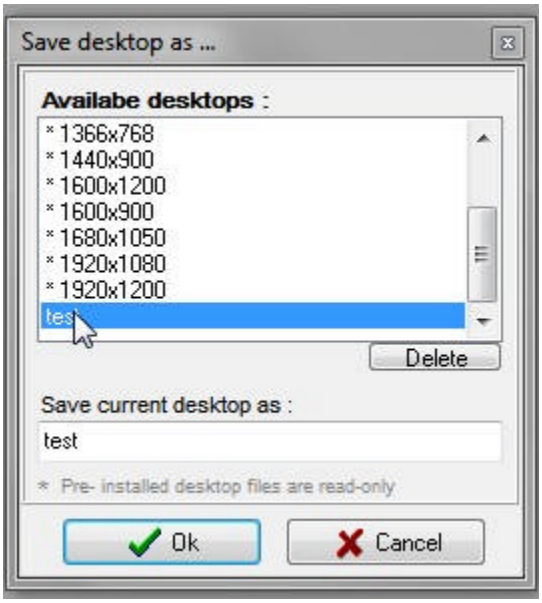
Changing your monitor is often a reason to delete a previous created desktop with another screen configuration.

Follow these **steps** to delete a desktop

1. ***Display>Desktop Panels>Save desktop as ...***



2. **Select** the desktop in the list you want to delete. In this example we choose for the desktop **test**.



3. Click the ***Delete*** button.

3.2 Working with images

In this section you will learn the different manipulation you can do make on an image so it serves your diagnosis better.

We will start with the **basic manipultation**. This is a great starting point if you have just started using Mediadent.

Afterwards if you want you can take a closer look at certain topics.

3.2.1 Great overview:

1. Basic manipulation of the images (Section 2.3)

3.2.2 More detail on working with the different features

2. Working with Windowing (Section 3.2.2)

3. Working with Pseudo Colors (Section 3.2.3)

4. Working with the Zoom Window (Section 3.2.5)

5. Working with Annotations (Section 3.2.4)

6. Working with the Region of Interest (Section 3.2.6)

3.2.3 More advanced manipulation of the images:

7. Working with the Optimize feature (Section 3.2.8)

8. Working with Filters (Section 3.2.7)

3.2.1 Working with images

Mediadent offers a wide range of **tools** to **manipulate** your images so they can help you with your diagnoses.

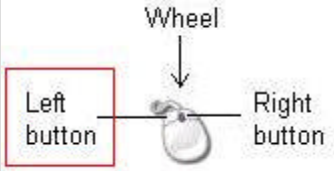
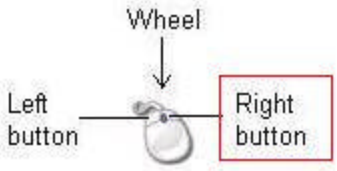
Often the raw image is of a poor quality, maybe images are too light or too dark.

It can also be practical to zoom into a particular area of the image for detailed analysis.

This article will explain the **basic manipulations of images**.

But first things first, **load an image into a Viewport** and find out what the possibilities are!

- **1. Manipulation of the image by using the mouse**

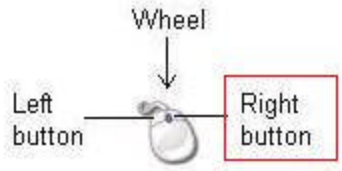
Action	**Result**
LEFT mouse button	- Go to **full** screen mode - Change the **brightness** and **contrast** of the image.
3.2.1.1 1. Full Screen View of an image	
By ***double clicking*** with your ***left mouse button*** on the image, you will see the image full screen. To go back, just ***double click*** again and you will return to the Mediadent screen.	For detailed analysis you can view the image full screen.
3.2.1.2 2. Change contrast and brightness	
Press and hold the ***LEFT*** mouse button and move the cursor on the image : up and down, left to right. 	If you picture if of a bad quality you can quickly change the contrast and/or brightness.
RIGHT mouse button	- Activate the **magnification frame** - Change the **magnification** within the magnification frame
3.2.1.3 3. Magnify a part of the image	
Press and hold the ***RIGHT mouse button*** to use the **magnification frame.** You can **move** the cursor while pressing and holding the right mouse button so you can go to a particular area you want to analyse in more detail. 	For detailed analysis of a certain problem area you can activate the **magnification frame**.

The magnification frame will appear if you **press and hold the right mouse button.**

3.2.1.4 4. Change the magnification within the magnification frame

Press and hold the ***RIGHT mouse button*** to use the **magnification frame.**

While **pressing and holding the RIGHT mouse button** you can turn the **wheel the mouse** up and down.



Sometimes the magnification in the magnification frame is not enough. You can zoom in or out in the magnification frame. This will allow you to do a detailed analysis of the patient's problem.

If you want to change the magnification within the magnification frame, you can turn the **wheel** of the mouse up and down while **pressing and holding the RIGHT** mouse button.

2. Manipulating images by using the Windowing

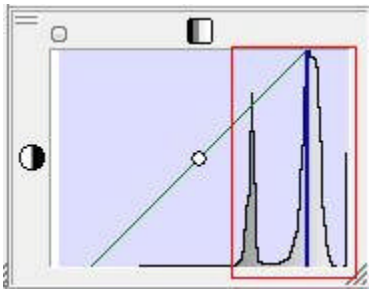
The **Windows function** is a very powerful feature in Mediadent.

- It will allow you to **improve** the quality of your image with 1 mouse click (automatic windowing, described in the article).
- It will allow you to **modify** the images that are of a **lesser quality**, too bright or too dark.

The **Windowing feature** will allow you to **filter** out the gray scales that are not relevant .

The **histogram** shows the retribution of the gray scales of an image.

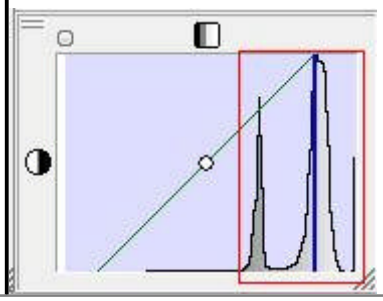
For example: If an image is **too bright** you will see that the histogram shows spikes on the right hand side of the chart.



This screenshot shows spikes on the right hand side, indicating that the image is too bright.

When activating the Windowing feature, the **gray scales** on the left hand side of the histogram are not relevant and can be discarded.

In this **example** the image is very bright as a result of too little exposure time.

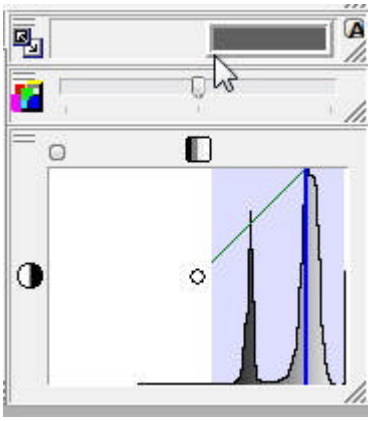
To get a better picture quality, we will use the **Windowing** ruler.	The **Windowing ruler** and the **histogram** work together.
	

In this section you we will cover the following topics :

- **1. Use the Windows slider**

In this example we will slide the Windowing ruler to the **right**, because the histogram indicates that there are relevant gray scales.

To slide ***PRESS*** and ***HOLD*** the **left mouse button** while dragging the slider to the **right**.

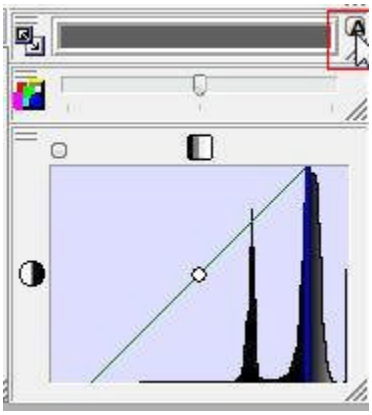


You will see the image changing on the fly.

2. Use the automatic Windowing

We have made it even easier for you with the **automatic Windowing feature**.

Press the **icon** on the right hand side of the Windows ruler and Mediadent will **automatically filter** out the most relevant gray scales.



3. Reset the image

You can **reset** your changes by clicking on the small icon on the left hand side of the Windowing ruler.

You will see the image revert to the original state.

4. Save the modified image

Once you have modified the image via the Windowing feature, you can **Save the image.**

1. Click on the ***Save icon***	.
2. ***Save*** as a New Image	Choose **YES** if you want to keep the original version of the image. Choose **NO** if you want to replace the original version. We will choose to save the image as a new image. This means a new file will be created.
3. Give a name to the file	If you have chosen **YES**, you will be prompted for a name.
4. Click on the ***Save*** button	.
	The image will appear in the Image Library.

In this screenshot you see the difference between 2 images. The **left** image is the modified image with the Windowing feature, the **right** image is the original image.

3.2.2 Working with windowing

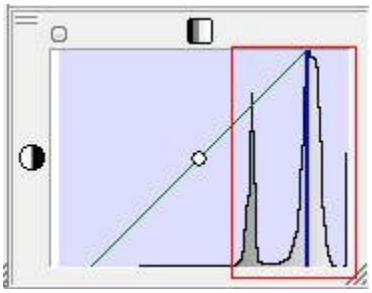
The **Windows function** is a very powerful feature in Mediadent.

- It will allow you to **improve** the quality of your image with 1 mouse click (automatic windowing, described in the article).
- It will allow you to **modify** the images that are of a **lesser quality**, too bright or too dark.

The **Windowing feature** will allow you to **filter** out the gray scales that are not relevant .

The **histogram** shows the retribution of the gray scales of an image.

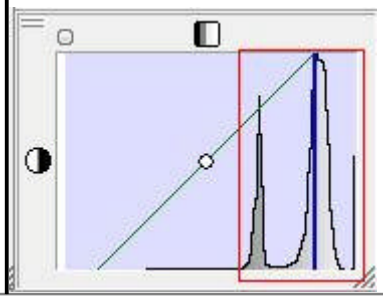
For example: If an image is **too bright** you will see that the histogram shows spikes on the right hand side of the chart.



This screenshot shows spikes on the right hand side, indicating that the image is too bright.

When activating the Windowing feature, the **gray scales** on the left hand side of the histogram are not relevant and can be discarded.

In this **example** the image is very bright as a result of too little exposure time.

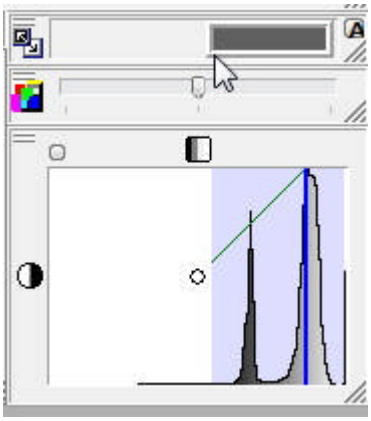
To get a better picture quality, we will use the **Windowing** ruler.	The **Windowing ruler** and the **histogram** work together.
	

In this section you we will cover the following topics :

- **1. Use the Windows slider**

In this example we will slide the Windowing ruler to the **right**, because the histogram indicates that there are relevant gray scales.

To slide ***PRESS*** and ***HOLD*** the **left mouse button** while dragging the slider to the **right**.

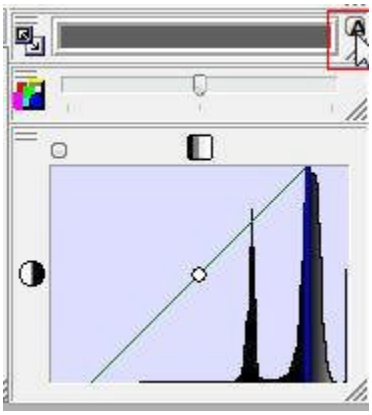


You will see the image changing on the fly.

2. Use the automatic Windowing

We have made it even easier for you with the **automatic Windowing feature**.

Press the **icon** on the right hand side of the Windows ruler and Mediadent will **automatically filter** out the most relevant gray scales.



3. Reset the image

You can **reset** your changes by clicking on the small icon on the left hand side of the Windowing ruler.

You will see the image revert to the original state.

4. Save the modified image

Once you have modified the image via the Windowing feature, you can **Save the image.**

1. Click on the ***Save icon***	.
2. ***Save*** as a New Image	Choose **YES** if you want to keep the original version of the image. Choose **NO** if you want to replace the original version. We will choose to save the image as a new image. This means a new file will be created.
3. Give a name to the file	If you have chosen **YES**, you will be prompted for a name.
4. Click on the ***Save*** button	.
	The image will appear in the Image Library.

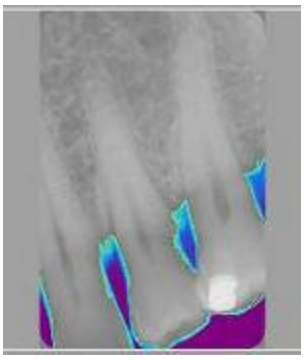
In this screenshot you see the difference between 2 images. The **left** image is the modified image with the Windowing feature, the **right** image is the original image.

3.2.3 Working with pseudo colors

Pseudo colors can be used when you want to **analyze** images from patients in great detail.

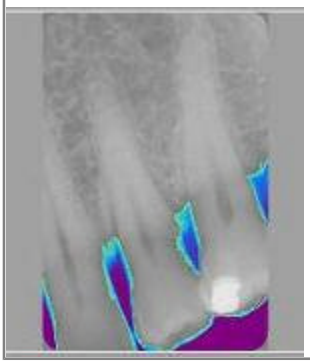
It allows you for example to see **fractions** in the tooth because you will see a different coloration of the fraction within the tooth.

By using the **Pseudo colors** the grayscales are **converted** to pseudo colors so you we see the difference in density.



Follow these steps to use the **Pseudo colors**.

Action	Explanation
1. Select an image in the Viewport	The image in the Viewport.

2. Use the ***slider Pseudo color*** slider	Slide to the **right**, the grayscales on the left hand side of the histogram are colored. Slide to the **left**, the grayscales on the right hand side of the histogram are colored.
3. Slide to the **right**	In this example we will slide to the **right**.
4. Result 	You will see the greyscales converted into **pseudo colors.**

3.2.4 Working with annotations

Annotations can be an important analysis tool.

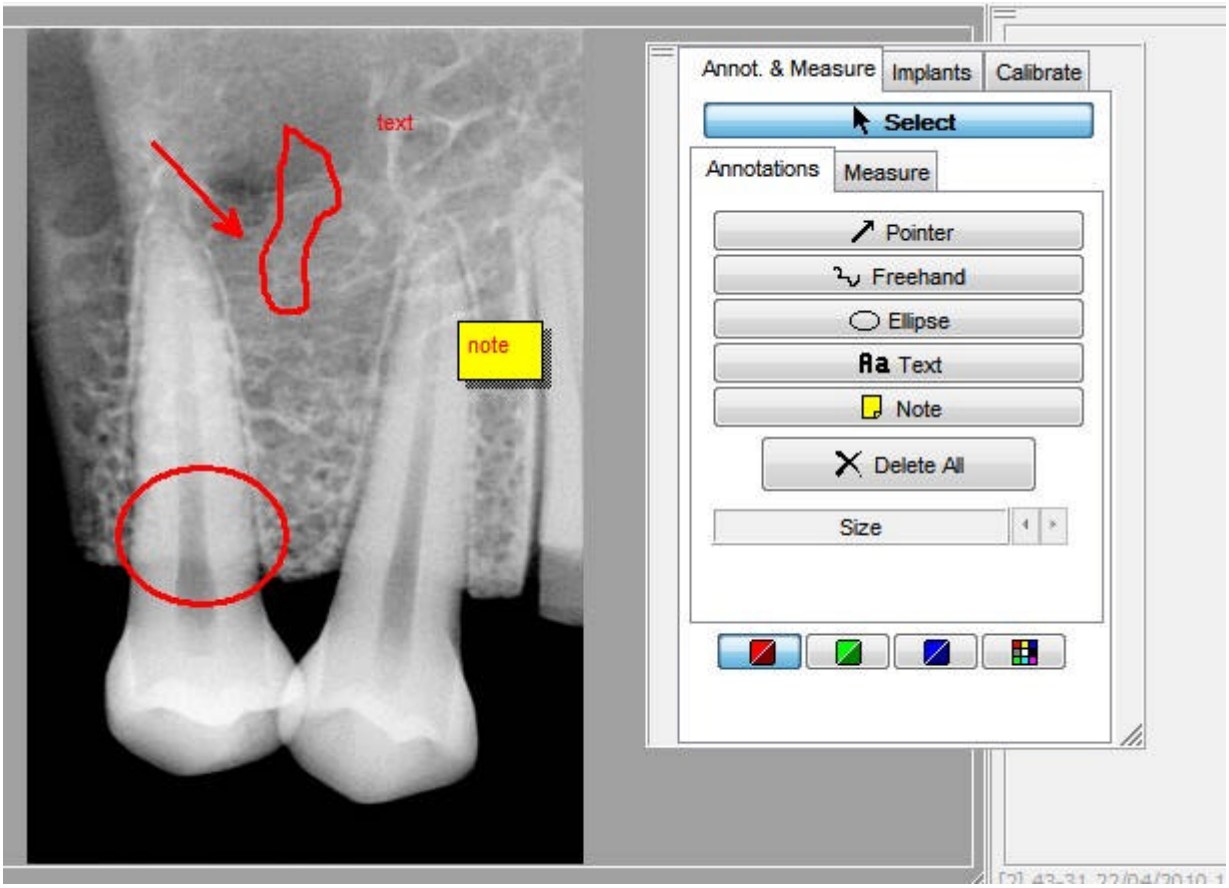
By adding annotations, you can provide your patients with extra information or point out to your peers the problem area's.

Important to understand is that the **annotations** reside in a **layer** on top of your image. It will not effect the original image.

You can add **different types** of annotations:

- Simple annotations (annotations tab)
- Measure annotations (measure tab)
- Implants (separate module)

The annotations can be **saved**, **printed** and sent by **e-mail**.



There is an **optional module** for **Implants**. In Mediadent you will find support for **new implant templates** such as Nobel Biocare, Replace straight groovy & replace tapered groovy. The implants module is used to draw implants on the images. This can be interesting to find out which implant will fit. **Contact ImageLevel (Section 10)** for more information.

- To **activate** the **Annotations**, ***click*** on the icon in the Iconset.

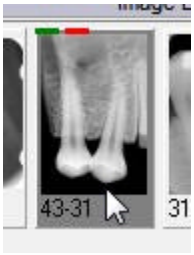
- To **de-activate** the **Annotations**, ***click*** on the icon in the Iconset. (Note that the Annotations icon is **grayed out**, indicating that the Annotations are active)

VERY important remark : When you want to **SAVE** an image **with annotations**, you first need to **de-activate** the Annotations dialog box. (This means the dialog box to draw Annotations may NOT be on the screen!!)

To **de-activate** the Annotations, click on the Annotations icon and the dialog box will **disappear**.

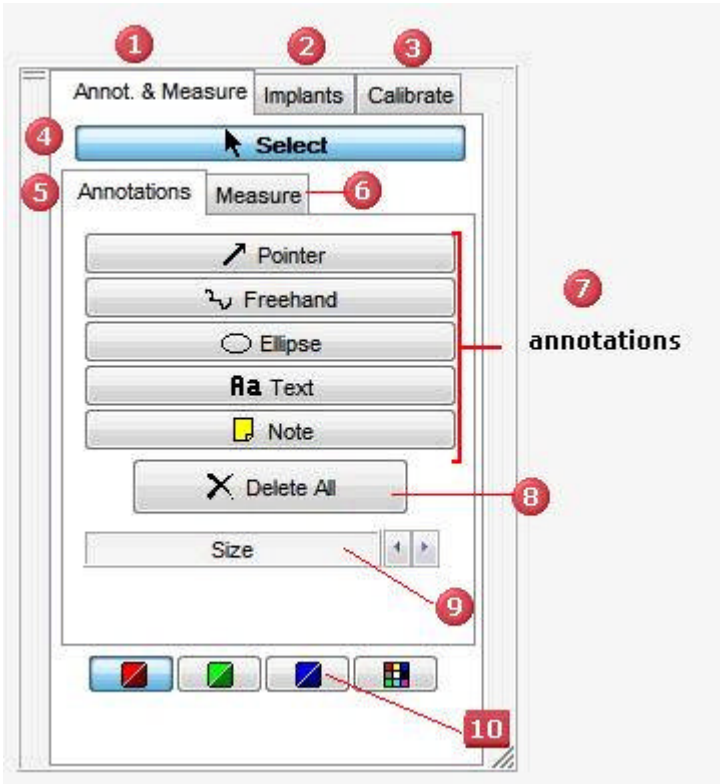
Then **SAVE** the image.

Once you have saved an image with annotations, you will see a **small green** bar on the top of the image.



1. Overview Annotations dialog box

In this topic you will find an **overall overview** of the different elements in the Annotations dialog box.



1	**Annotations and Measure tab**: This is by default opened when you activate the Annotations. It will allow you to add annotations 7 such as pointers, freehand, Eclipse, Text and Notes to your images. On this tab you will be able to Delete All 8 the annotations and change the size 9 and the color 10.
2	The optional **Implants** module. If you don't have this module, the tab will not be visible. If you want to know how to acquire the Implants module, please **contact us (Section 10)**.
3	**Calibrate tab**: with this tab you will be able to calibrate your image. To learn more read the article **'How to calibrate an image' (Section 4.4.2)**.
4	**Selection tool**: click on this button before you select an annotation.
5	The active **Annotations tab** by default.

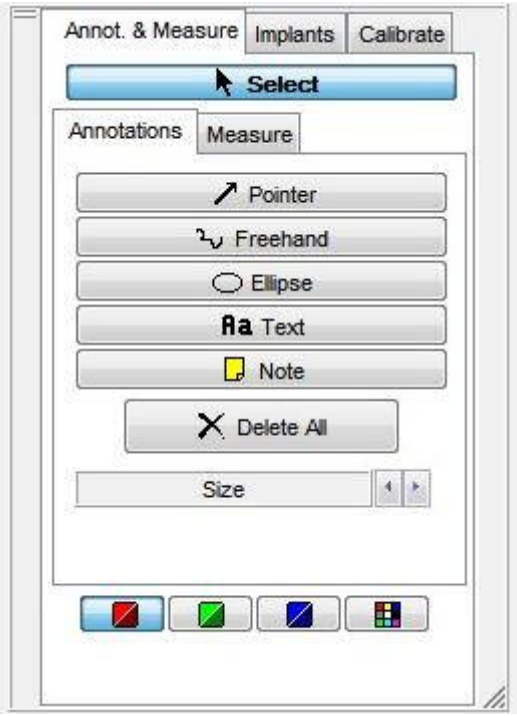
6	**Measure tab**: On this tab that will be explained later, you will be able to add, other types of annotations. The annotations that are added here are measured, so you image needs to be calibrated. Examples are Rectangle, Circle, Angle, Polyline, Polygon...
7	**Annotations**: The different annotations available on this tab. These annotations are not related to the size of the image.
8	**Delete All**: All annotations made by the Annotations tab will be deleted when clicking on this button.
9	**Size**: **Increase** the size of the selected annotations.
10	**Color**: Change the **color** of the selected annotation. If you are working in a large office with **several specialists** it can be useful to give **every specialist** his/her **own color**. In this way you recognize who has annotated what on the image.

2. How to use the annotations on the Annotations tab

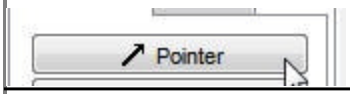
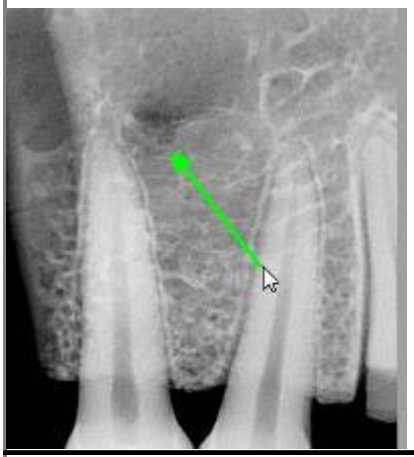
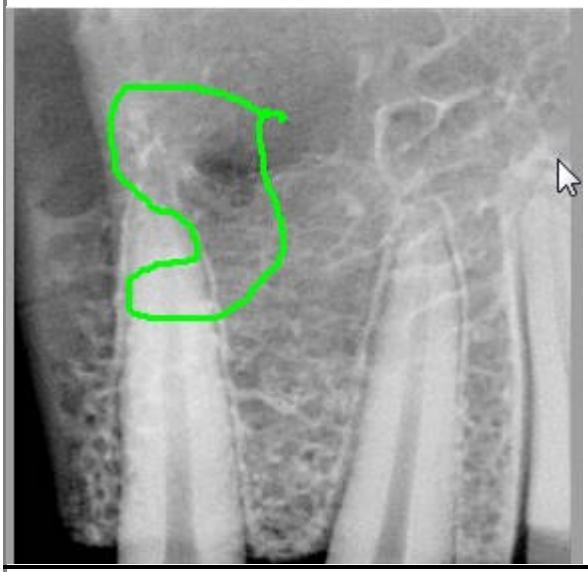
In this section we will explain the annotations that can be used on the default **Annotations tab**.

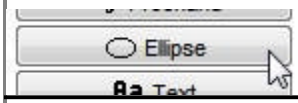
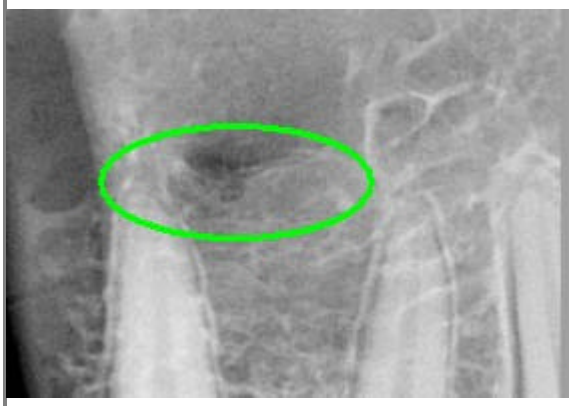
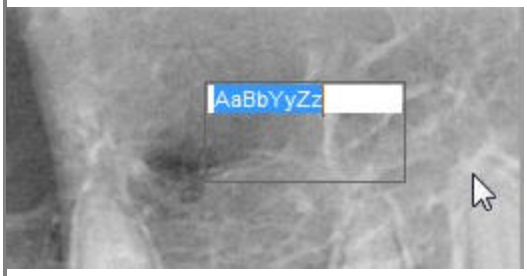
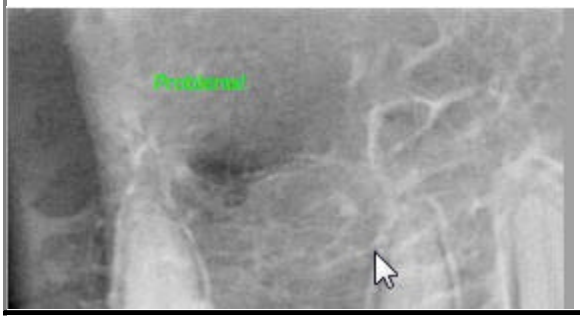
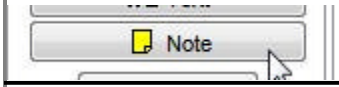
These annotations are free and not relative to the image (so the size of the annotations is not relative to the image). This can be used for example to quickly show your patient the problem area.

This tab provides you with the **basic usage** of the annotations.

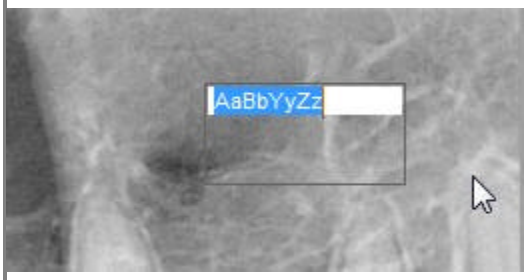


Action	Explanation
Load an image in the Viewport.	Make sure you have an image loaded into a Viewport and that the Viewport is selected.

Activate the **Annotations** by using the icon. 	Once the annotations tab is activated you will see the icon is grayed out.
1. Add a pointer to your image	
Click on the **Pointer** button to add a pointer. 	.
Press and ***hold*** the ***LEFT mouse button*** while drawing the pointer. 	The point where you **start** drawing the pointer is the **tip of the pointer** or the **arrow**. Drag the box out while **pressing** and **holding** your **LEFT** mouse button.
2. Add freehand drawing to your image	
Click on the **Freehand** drawing button 	.
Press and ***hold*** the ***LEFT mouse button*** while drawing your freehand shape. 	Draw the shape while **pressing** and **holding** the left mouse button.
3. Add an ellipse to your image	

Click on the **Ellipse** button 	.
Press and ***hold*** the ***LEFT mouse button*** while drawing the ellipse. 	Draw the ellipse while **pressing** and **holding** the **left** mouse button.
4. Add text to your image	
Click on the **Text** button 	.
Press and ***hold*** the ***LEFT mouse button*** while drawing the text box.  ***Type*** the text in the text box. In this example I have typed 'Problems!' 	Draw the text box while **pressing** and **holding** the **left** mouse button. The text box will appear and you can start typing the text in the text box.
5. Add a note to your image	
Click on the **Note** button 	By using the Note it seems like you paste a post-it on top of your image.

Press and ***hold*** the ***LEFT mouse button*** while drawing the note box.



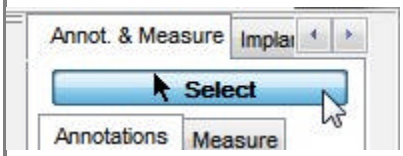
Type the text in the note box. In this example I typed 'Note'.

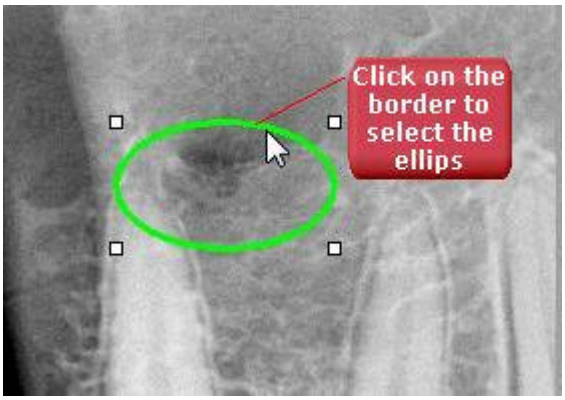
Draw the note box while **pressing** and **holding** the left mouse button.

The note box will appear and you can start typing the text in the text box.

6. Change the size of the annotations

Select the annotation (eclipse) by ***clicking*** on the ***select*** button (make sure the select button is highlighted) and then on the ***border ellipse***.





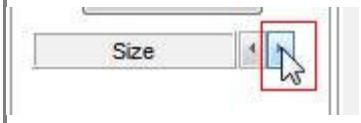
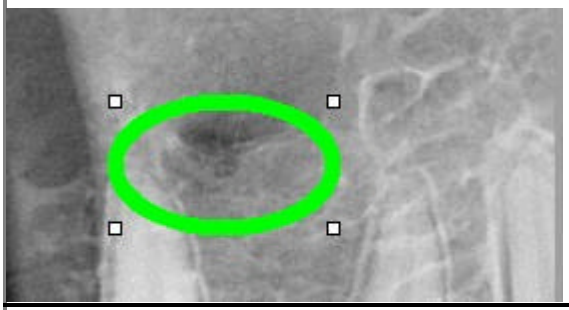
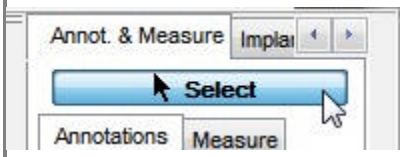
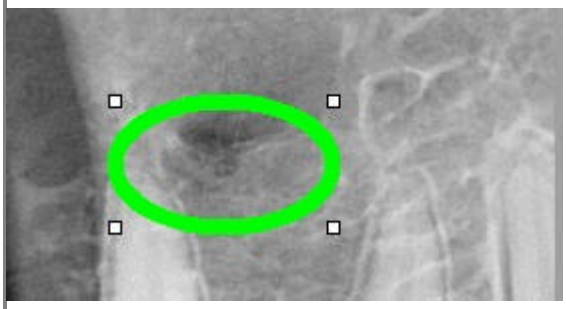
In this example we will change the **size** of an eclipse.

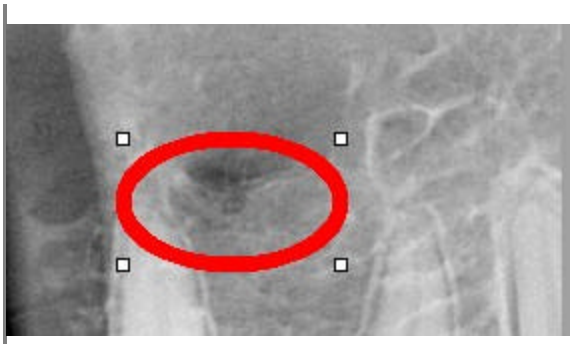
The same steps can be applied to the other annotations.

When the **Select button** is **pressed** and you move towards the **border** of the annotation, you will notice that the **cursor changes shape.** At that moment you can **click** with the **left mouse button** to select the annotation.

When selecting a shape, you will notice **small rectangles** in the 4 **corners**.

This means the

	shape is correctly selected.
Click on the right arrow of the size button to **enlarge** the eclipse border.  	In the example we clicked about 10 times on the **right** arrow of the size button to have the result. If you want to **decrease** the size, you will have to click on the **left** arrow of the size arrow.
7. Change the color of the annotations	
Select the annotation (eclipse) by ***clicking*** on the ***select*** button (make sure the select button is highlighted) and then on the ***eclipse***.  	In this example we will change the **color** of an eclipse. The same steps can be applied to the other annotations. When selecting a shape, you will notice **small rectangles** in the 4 **corners**. This means the shape is correctly **selected**.
Click on one of the color icons to change the color 	In this example we will change the color into **red**. You can change it into red, green, blue by default.



Click on the icon to choose another color.

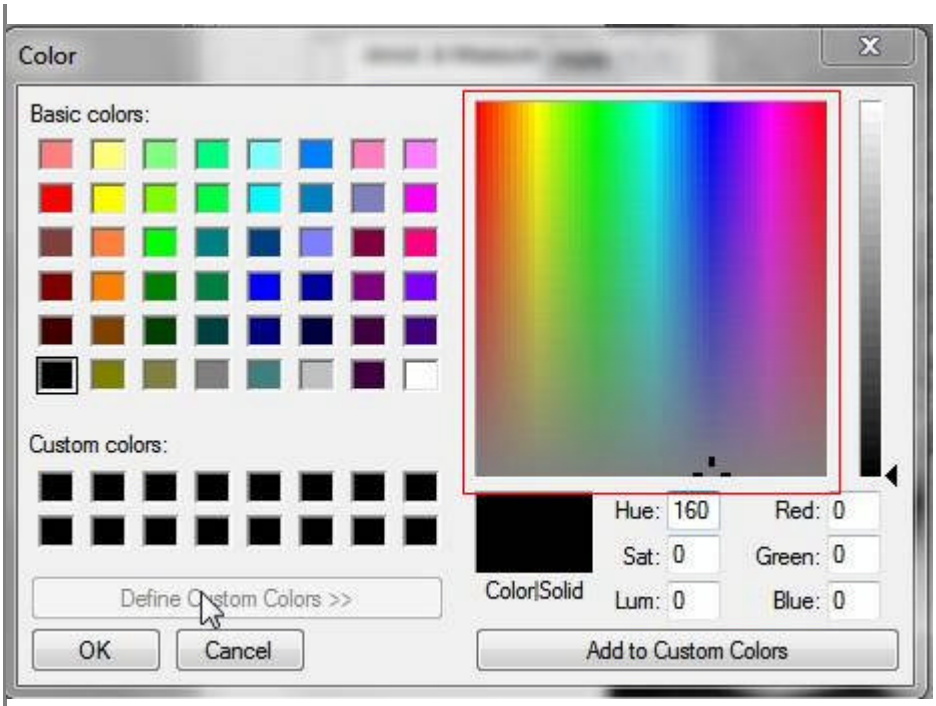
If you are not happy with the color, you can click on the icon and choose **another color**.

This dialog box appears, **select one of the colors**.

Click on the ***Define Custom Colors>>*** button to customize your colors.

If this is not sufficient, you can even **define custom colors**!

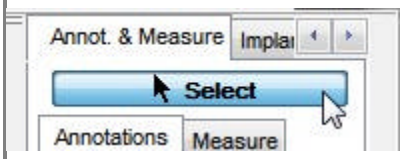
Click with the mouse in the colored area and **Add to Custom colors**.

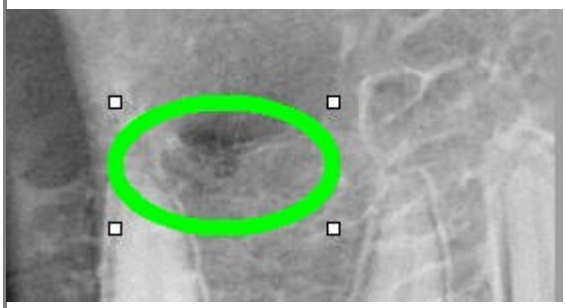


8. Delete annotations

3.2.4.1 Delete a particular annotation

Select the annotation you want to delete





To **verify** that the correct annotation is selected, you need to see **small rectangles** in the corners surrounding the annotation.

Press the ***delete*** button on your **keyboard**.

3.2.4.2 Delete All annotation

Click on the icon to ***Delete All*** annotations

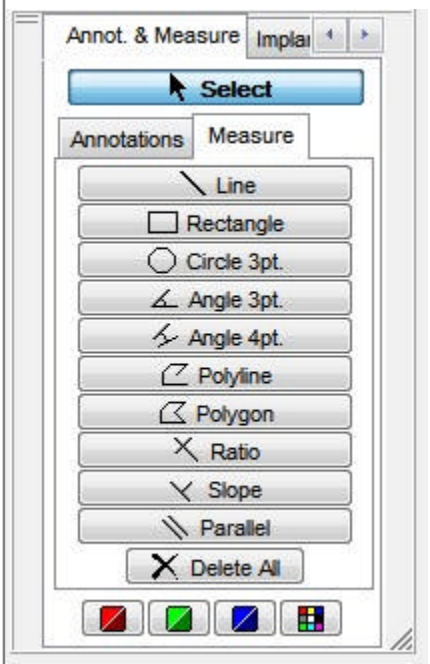
Be aware that the **Delete All** button will only delete the annotations made via de **Annotations** tab.

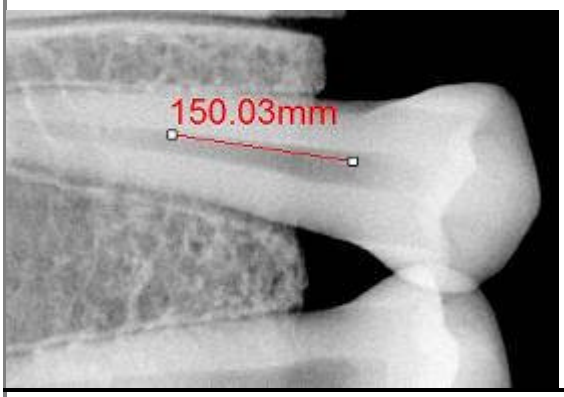
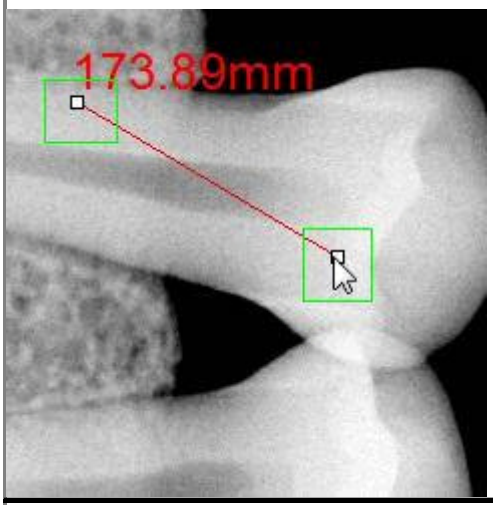
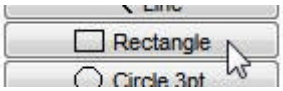
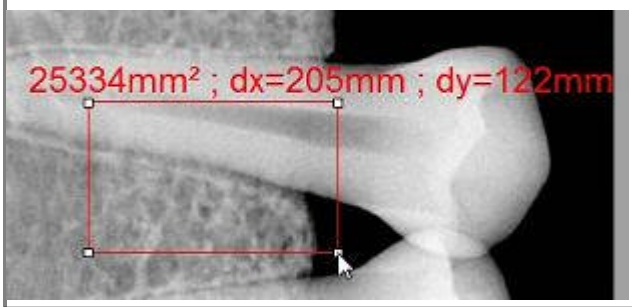
If you have added

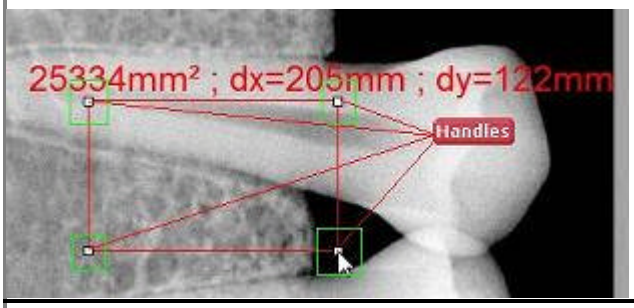
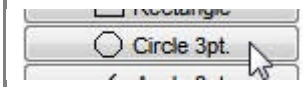
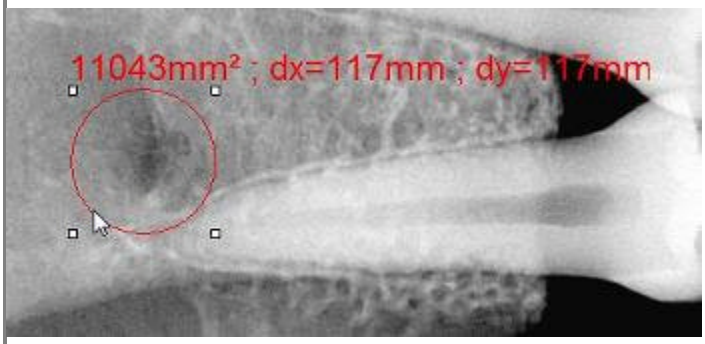
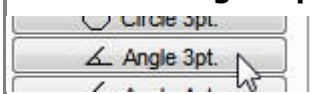
	annotations via the **Measure** tab, they will not be deleted. To delete those annotations, you will have to select the **Measure** tab and click on **Delete All** button.

3. How to use the measure annotations on the Measure tab

When you use the annotations of the Measure tab, your image has to be **calibrated**. You will notice that an image is NOT calibrated when you draw an annotations (from the Measure tab), you will see the measurement **Pixels** in stead of **mm**. Read the article **'How to calibrate an image' (Section 4.4.2)** for more information on calibrating an image.

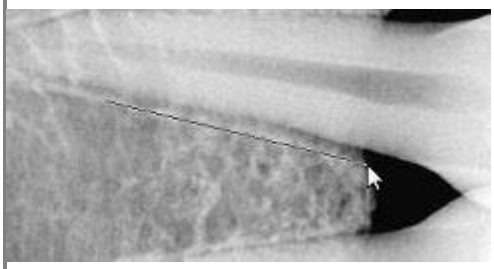
Action	Explanation
1. Load an image in the Viewport.	.
Activate the **Annotations** by using the icon. 	.
2. Draw a line via the Measure tab	
  	Choose the ***Measure tab*** in the Annotations and Measure dialog box.
Click the ***Line*** button 	.
Press and hold the ***LEFT*** mouse button while ***drawing a line*** on	

the image.  	It is important to **press** and **hold** the **left** mouse button while drawing the line. Once you release the left mouse button, the line will be drawn.
2.1. Manipulations of the line	
Press and ***hold*** the ***LEFT*** mouse button when moving the **line handles**.  	By grabbing the **line handles** (the little small rectangles) you can make the line longer or shorter. You can also move the orientation of the line. Move the **line handles** (small rectangles) from left to right, to shorten or lengthen the line. Move them up and down to change the orientation of the line.
3. Draw a Rectangle	
Click on the ***Rectangle*** button  	You have the possibility to draw a rectangle on your image to draw the attention to a certain area.
Click the ***LEFT*** mouse button in the **left hand corner** of the rectangular. When you have positioned the mouse pointer in the **right hand corner**, ***click*** again and the rectangular gets automatically drawn.  	The handles can be used in the same way as the lines. To **resize** the rectangle drag the handles out will **enlarge** the rectangle, and dragging the handles inward will **decrease** it's size. You also see the measurements of the rectangle.
3.1 Manipulations of the rectangle	

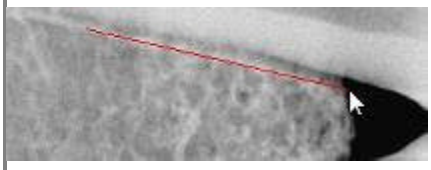
Press and ***hold*** the **LEFT** mouse button while dragging the handles to resize the rectangle to the desired size. 	In the corners of the rectangle, you will see the **handles** (small rectangles). You can make the rectangle smaller or larger.
4. Draw a circle	
Click on the **Circle 3 pt**. button 	To draw a circle in Mediadent, you need to indicate **3 point** that make the size of the circle. (Hence the name of the button: Circle 3pt.). If you want to point the attention to a certain portion of the image, you just **outline** the area with 3 point and **automatically** the circle get drawn.
To **outline 3 points**, just click with the **left** mouse button **3 times around the area** you want to point the attention to. The circle is automatically drawn. 	You will see that the circle get drawn **automatically** when you have placed the 3rd point. As with the previous shapes, you can use the **handles** to resize the circle. ***Press*** and ***hold*** the **LEFT** mouse button while **resizing** the circle via the handles.
5. Draw an Angle 3pt.	
Click on the **Angle 3 pt.** button 	To draw an angle, you will need **3 points**: the **beginning** of the first half line, the point of the **vertex** and the **ending** of the last half line.
	To draw an angle you only have to click 3 times :

First for the **starting point** of the angle, second for the **vertex** and third for the **endpoint**.

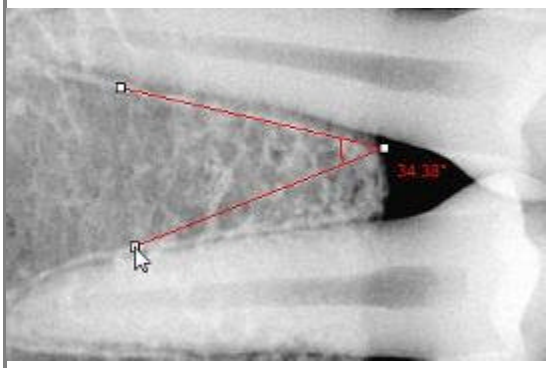
Indicate the **beginning** of the first half line by clicking with the **LEFT** mouse button, you have now blocked the mouse pointer and can **move** to the endpoint or **vertex**.



Click with the **LEFT** mouse button to indicate the **vertex** of the angle.



Now you can **move** the mouse to the **endpoint** of the **second half line**. **Click** to **fix** this point and the angle will be drawn.



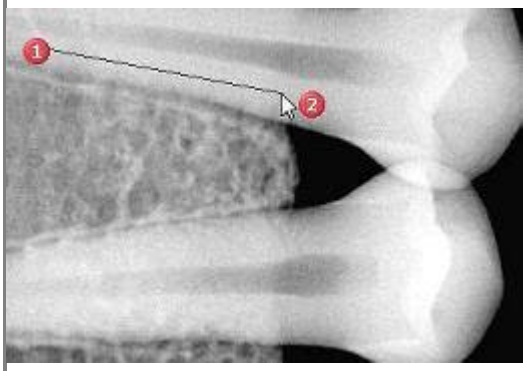
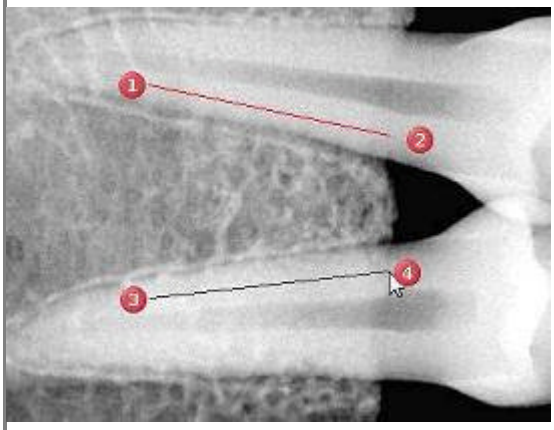
The **angle** is automatically calculated.

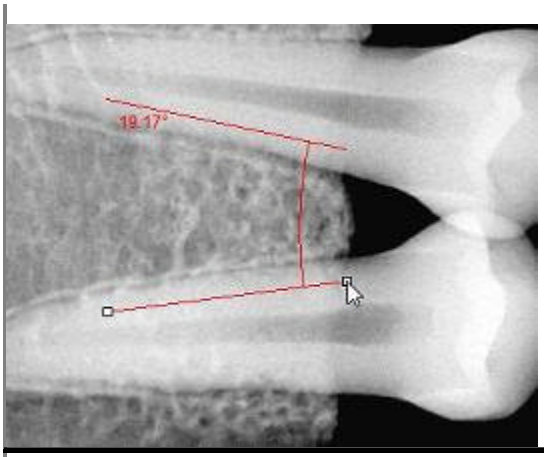
As in previous examples, you can use the **handles** to change the **starting point**, point of the **vertex** and the **endpoint**.

Automatically the **angle** will be **recalculated**.

6. Draw an Angle 4pt.

During the analysis process it is useful to be able to calculate the **angle** between 2 teeth.

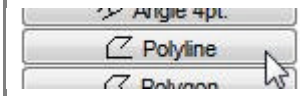
Click on the Angle 4pt. button 	In Mediadent you can draw a **4 point angle**. You need 4 points, the beginning- and endpoint of the **first** half line and the beginning- and endpoint of the **second** half line. The angle will be calculated automatically.
Click the **first** point 1 (you have blocked the mouse), you can move to the **end** point 2 of the first half line. 	You need to click **twice** with the **LEFT** mouse button in the beginning of the half line and a second time at the end of the half line.
Move to the **first** point 3 of the second half line and click with the **LEFT** mouse button.  Move to the **end** point 4 of the second half line and click with the LEFT mouse button..	Once you have clicked the



4th point, the angle between the two half lines will be calculated.

7. Draw a Polyline

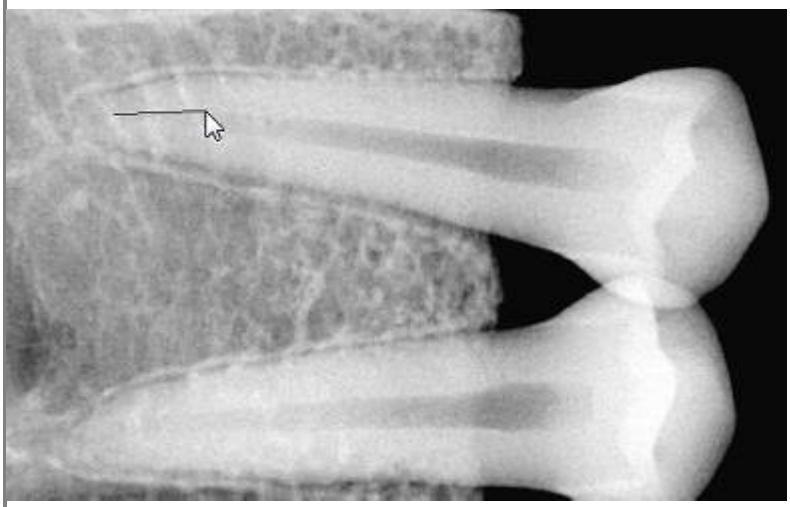
Click on the ***Polyline*** button



A Polyline is a connected series of line segments and is often used to **analyse** the root canal of a tooth.

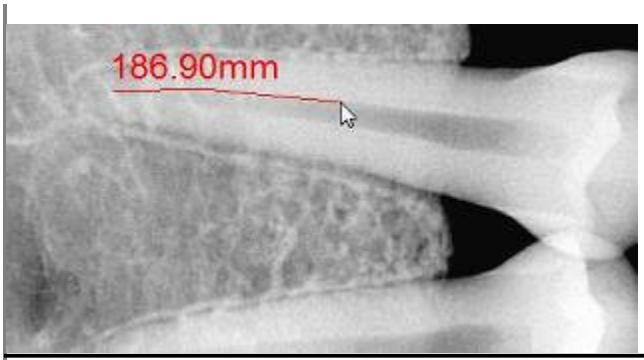
You will be able to get the measurement of the root canal.

Click on the **first point** of the polyline



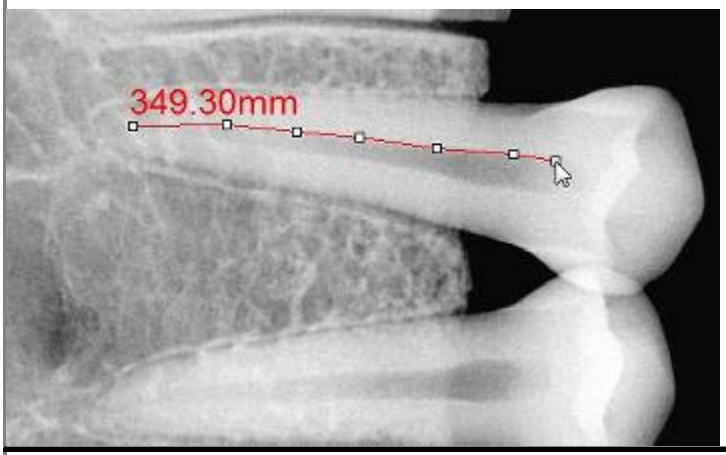
Click with the **LEFT** mouse button to create a line segment.

Every time you click with the **LEFT** mouse button you have created a **point** (line segment) on the polyline and you will get the the measurement.



You will notice that the line turns **RED** when you have clicked with the LEFT mouse button for the first time. This means you have created you first line segment.

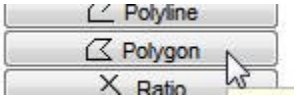
To **end** the polyline, ***double click*** with the **LEFT** mouse button.



You will see the **total measurement** of the polyline and the point you have created.

8. Draw a Polygon

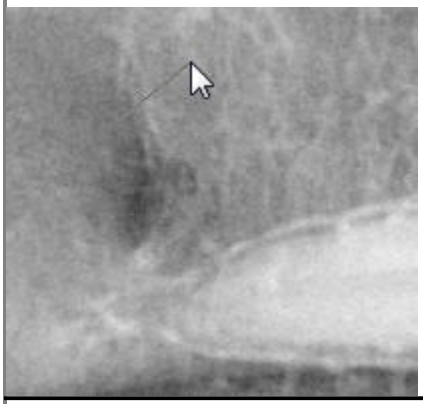
Click on the ***Polygon*** button



In the same spirit of the Polyline, you will be able to use the polygon to calculate the surface of a shape.

It can be practical to calculate the **surface** of particular problem area.

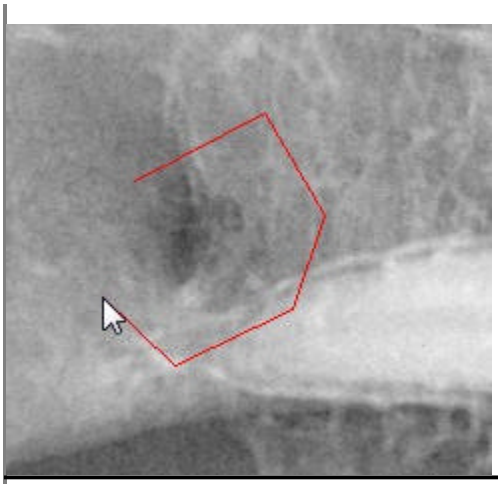
Click with the **LEFT** mouse button on the **starting point** of the area you want to measure.



As long as you don't click to add a point, the line will remain **black**.

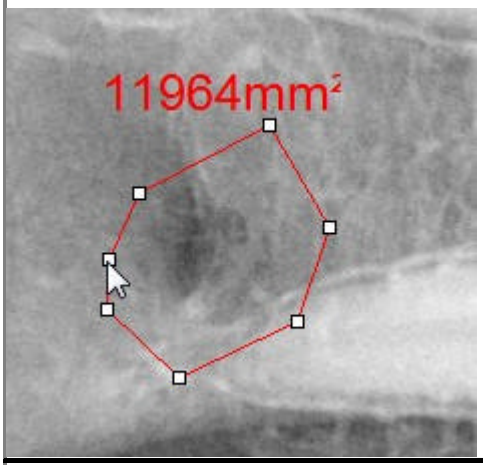
Every time you click with the **LEFT** mouse button you will create a point on the Polygon.

You can **add points** to the area by clicking with the **LEFT** mouse button



Here I have created 4 points on the Polygon.

To **end** the polygon**, double click** with the **LEFT** mouse button

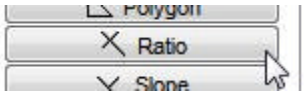


You don't have to close the polygon, when you double click the polygon is closed automatically.

Automatically the **surface** is measured.

9. Draw Ratio lines pieces

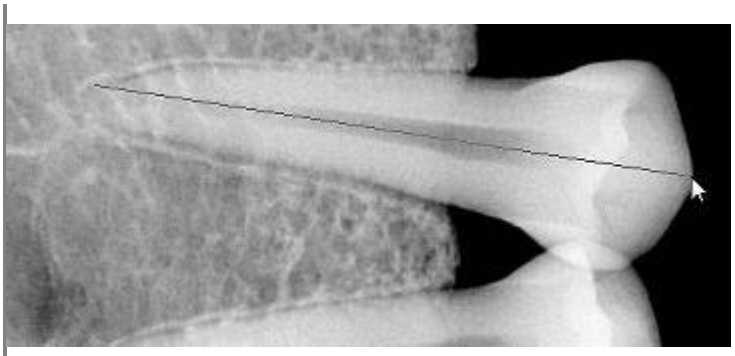
Click on the ***Ratio*** button



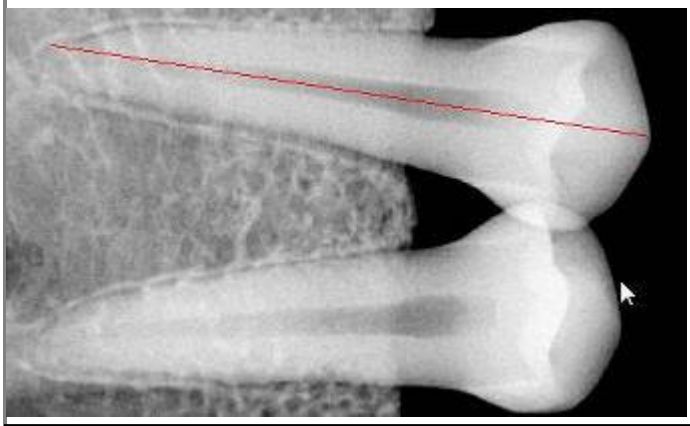
You have the possibility to draw 2 line pieces and let Mediadent calculate the **ratio** between the 2 line pieces.

The ratio is calculated by taking the length of the first line piece and divide it through the length of the second line piece.

Click with the **LEFT** mouse button on the image to indicate the **begin point** of the first line piece



Click with the **LEFT** mouse button to indicate the **end point** of the first line piece

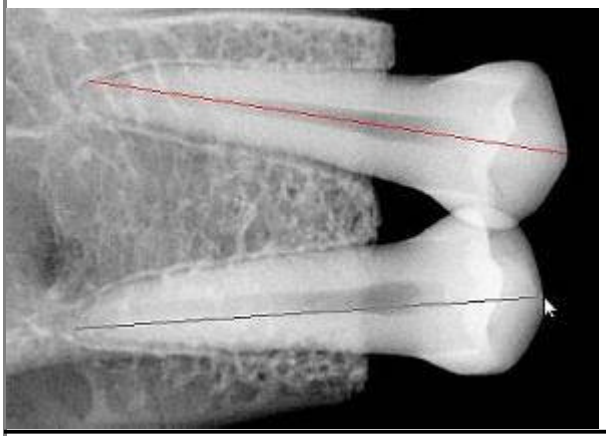


Once you have clicked with the **LEFT** mouse button to indicate the end point of the first line piece, you will notice the line piece turns **RED**, indicating the end of the first line piece.

You can now move the mouse to the begin point of the second line piece and click with the LEFT mouse button.

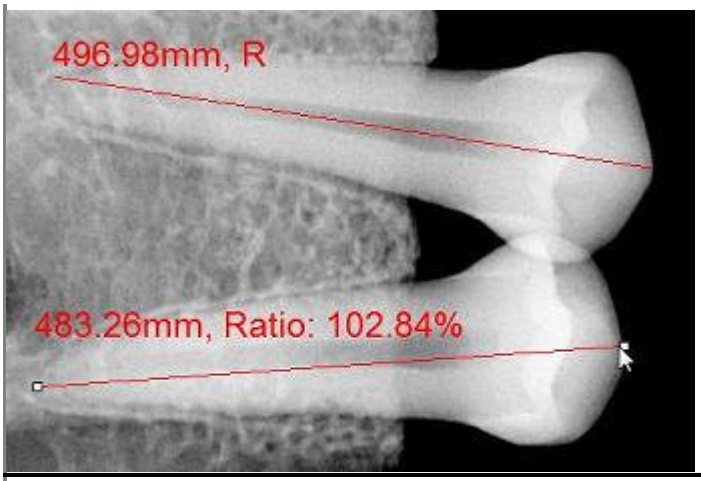
Move to the point on the image you want to indicate the **starting point** of the **second line piece** and click with the **LEFT** mouse button.

Move to the point on the image you want to indicate the **end point** of the **second line piece** and click with the **LEFT** mouse button.



We want to calculate the ratio between 2 line pieces, this could be the length of the teeth.

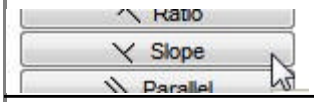
Once you have clicked the last end point of you last end point, you will see the lines turn **RED** and the



ratio is calculated.

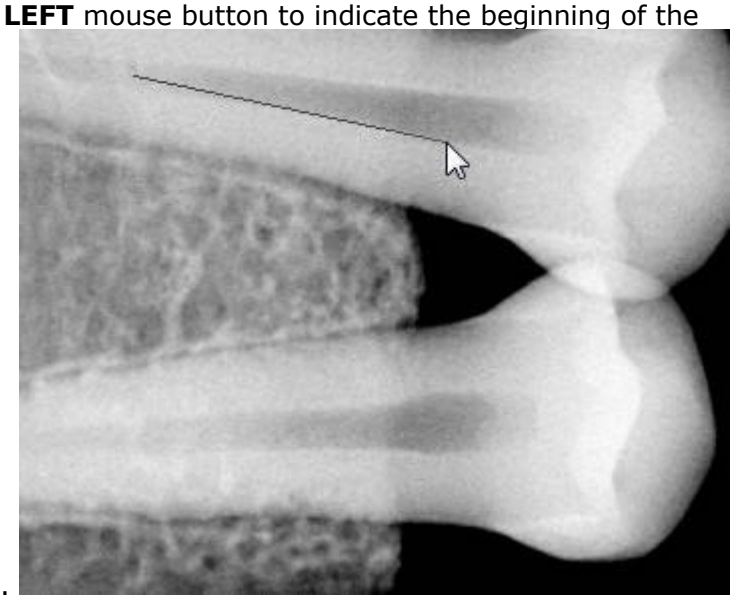
10. Draw a Slope

Click on the ***Slope*** button



Mediadent will calculate the **slope** between **two line pieces**.

Click with the **LEFT** mouse button to indicate the beginning of the first line piece.

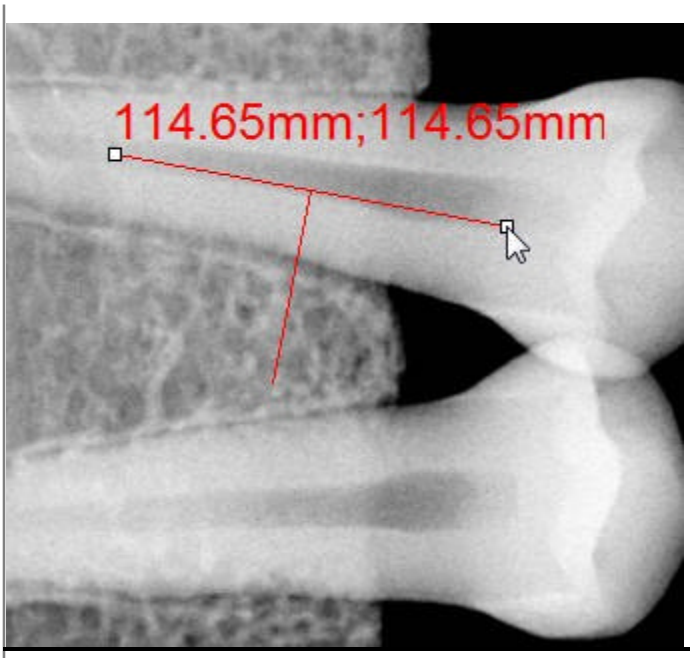


Move the mouse to the **end point** and click a second time with the **LEFT** mouse button.

As long as the line is black, you can reposition the mouse pointer.

Once you have clicked with the **LEFT** mouse button to indicate the end point, the slope will be calculated.

You will notice the slope is **RED** indicated the calculation is done.

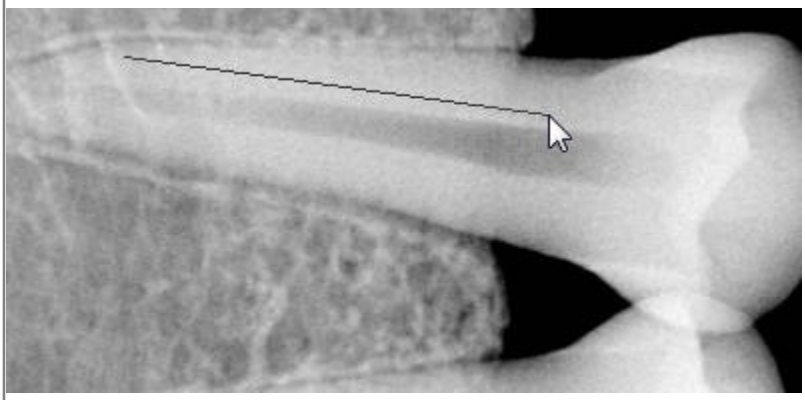


11. Draw parallel lines

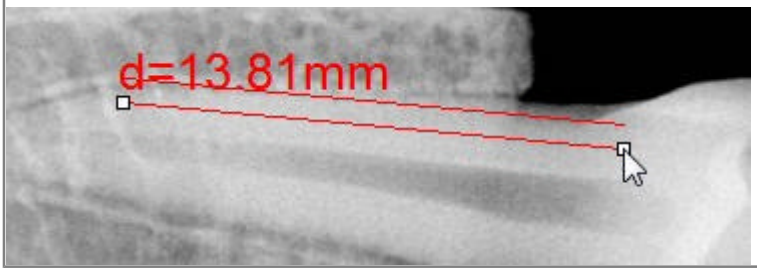
Click on the ***Parallel*** button

It can be practical to draw parallel lines on an image.

Click with the **LEFT** mouse button to indicate the beginning of the first line piece.



Move the mouse to the **end point** and click a second time with the **LEFT** mouse button.



The **second** time you click with the **LEFT** mouse button, the parallel lines get drawn automatically.

4. Printing annotations

To print annotations, you will need to indicate this in the **print dialog** box.

1. In the Mediadent menu choose ***File>Print*** ***-or-*** Click on the ***Print*** icon.

2. Load an **image** to print.

3. Check the Print Annotations box in the Print dialog box.

Learn more about the possibilities to print an image in the article **'Printing images' (Section 2.5)**.

If the Annotations box is not correctly positioned on your screen, read the article **How to move the zoom window (Section 4.2.8)** and learn how to move the Annotations box.

3.2.5 Working with the zoom window

The **Zoom** window will allow you to do **very detailed** analysis of your images. It is often necessary to go into great detail to track fractions and problems with the tissue.

The Zoom window will allow you to:

1. Magnify or zoom into a particular part of an image
2. **Apply different filters** to the image :
    - Invert
    - HistoEqualize
    - Emboss_NE
    - Gamma Correction

In this article we will explain how to **activate** the Zoom window and how you can **apply** a filter.

1. Working with the magnification or zoom function

Follow the steps to use the ***Zoom*** window:

Action	Explanation
1. Select an image and load it into the Viewport	.
2. Click on the ***ZOOM Windows icon*** -or- In the Mediadent menu choose ***Display > Desktop Panels >***	.

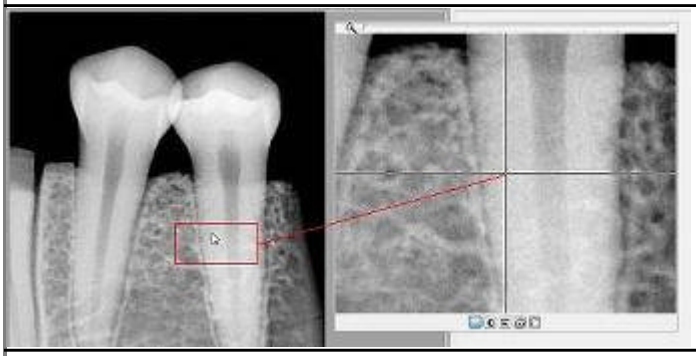
Zoom Window

An additional screen is opened next to the Viewport.

In the screen you will see a **magnification** of the point where the mouse is positioned in the Viewport.

The screen acts as a **magnifying glass**.

You will see the tissue and the teeth structure in large detail.



By moving you mouse to the correct position on the image in the Viewport, you will be able to analyze that **specific area** of the image in the ZOOM Window.

There are **2 ways** to zoom into the area :

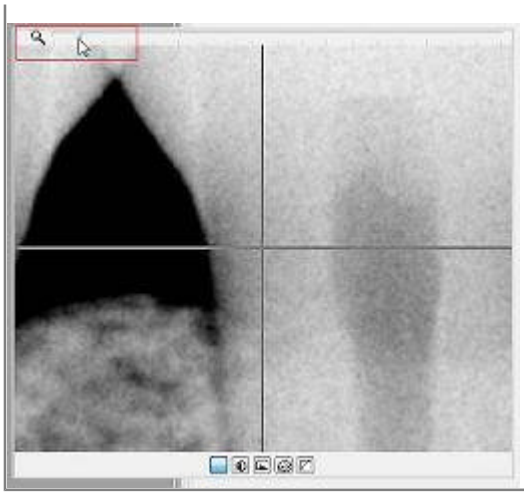
First ***move your mouse*** to the ZOOM Window.

1. If you have a mouse with a **wheel** :
   - Move the wheel of your **mouse UP** to ***increase*** the magnification of the area.
   - Turn the wheel of the **mouse DOWN** and you will ***decrease*** the magnification. (This will depend on the way the wheel mouse is setup).

2. Use the ruler on the top of the ZOOM Window and slide it to the right to get a greater magnification.

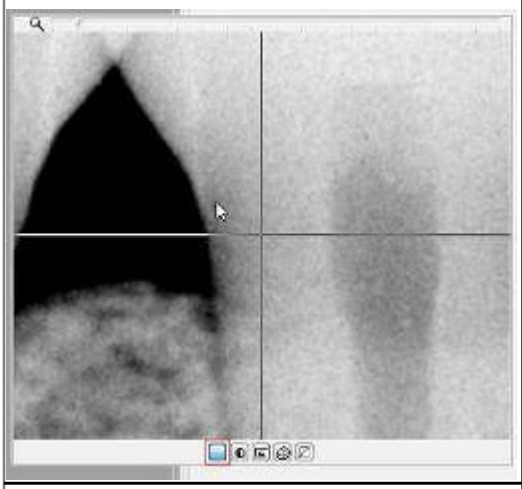
If the zoom does not work with the wheel of the mouse, you can use the zoom ruler on top of the Zoom window (method 2).

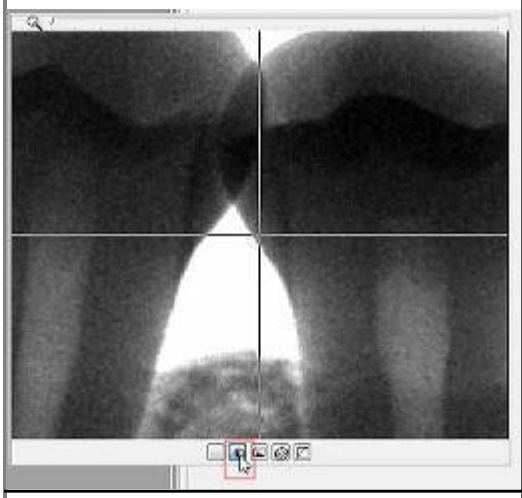
You can also use the arrow Up or Down to increase or decrease the magnification.



2. Applying a filter to the Zoom Window

If you want to apply a **filter**, click on the corresponding icons at the bottom of the screen. You can switch from one filter to another at any time.

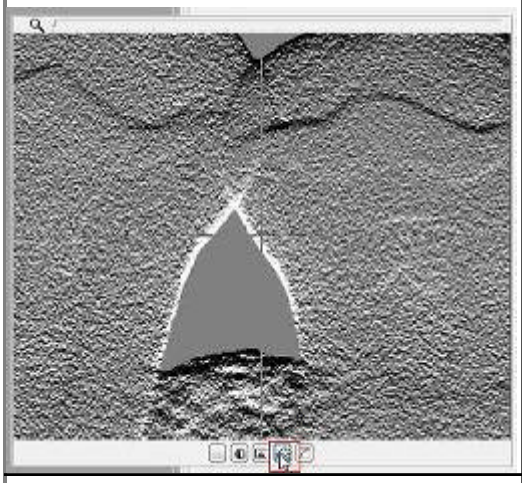
Back to normal 	The first icon will reset the image.
Invert	This filter will invert the image.



HistoEqualize

.

Emboss_NE



.

You can adjust this filter by using the Up and Down key on your keyboard.

Gamma Correction

. C

You can adjust this filter by using the **Up** and **Down** key on your keyboard.

If the position of the ZOOM Window interferes with your analysis you can **move** the ZOOM Window.

You will learn all about this in the topic **Moving the Zoom Window (Section 4.2.8)** and **Configuring the desktop (Section 4.2.6)**.

3.2.6 Working with regions of interest

Next to the **Zoom Window (Section 3.2.5)**, the Region of Interest (ROI) is a very practical feature if you want to **analyze** parts of your image in greater detail.

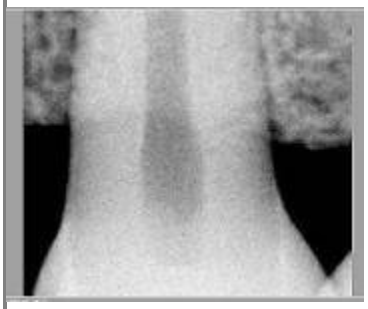
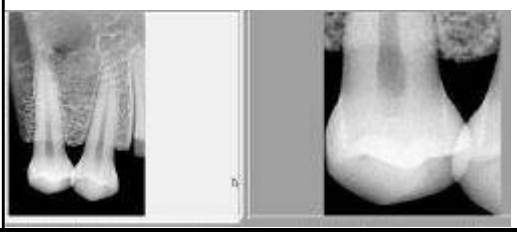
It will allow you to **CUT** a piece out of an image and analyze it in, for example another Viewport.

All the manipulation you make on an image are also possible in the ROI.

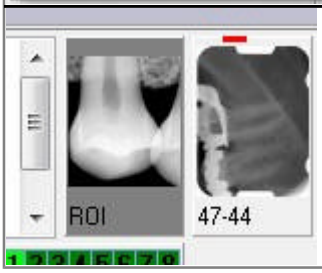
In this article you will learn how to **create** a ROI and how to **analyze** the ROI in a separate Viewport. You will also learn how to **save** the ROI.

To create the **Region of Interest** follow these steps:

Action	Explanation
1. ***Load*** an image in a viewport	Load the image you want to analyze in more details.

2. ***Click*** on the Region of Interest (ROI) icon. 	Use the Region of Interest (ROI) icon to **cut** a piece out of the image you want to analyze in more details.
3. ***Draw*** the part that you want to examine in more detail. 	***Press*** and ***hold*** the **LEFT** mouse button while drawing the ROI. By default you will cut out a rectangle. The part of the image you have cut out can be used for further analysis.
4. If you want to **analyze** this part of the image in **this** viewport, just ***click*** on the **ROI icon** again. 	Notice that the second time you click on the ROI icon, it has a **darker** color. It means you are ready to analyse this piece of the image.
	The result is that the **image** in the Viewport is **replaced** by the **ROI** (piece that was cut out). If you want to **revert** to the original image, click on the ***Reload*** icon and the **original** image will appear in the Viewport.
If you **do not** want the Viewport to be **replaced** and you want to analyze the ROI in **another** Viewport, follow these steps:	
1. Repeat **step 1 to 3** 2. **BEFORE** you click on the ROI icon, **select** another Viewport 3. Click on the **ROI icon**	You will notice that the ROI (part that was cut out) is loaded into the **other Viewport**. Now you can do any manipulations you would do on an image, like **Windowing (Section 3.2.2)**, **Pseudo Coloring (Section 3.2.3)**, change brightness and contrast etc… 

To **SAVE** the ROI (piece of the image):

1. ***Select*** the Viewport with the **ROI.** 2. ***Click*** on the **Save** icon. 	.
	Give the **image** a name.
	The image will appear in the **Image Library**.

You can choose the way in which you cut out of piece of the image : **rectangular** or **freehand**.

To choose **another** way : ***Click*** and ***hold*** the icon, you will notice that **extra icons** become available, choose **freehand** or **rectangular**.

The **first icon** is a nice **rectangle** the second is **freehand**. With freehand, you can draw yourself the area you want to analyze.

Read all about the manipulations in the article **'Basic manipulation of images' (Section 2.3)**, topic **'1. Manipulation of the image by using the mouse'.**

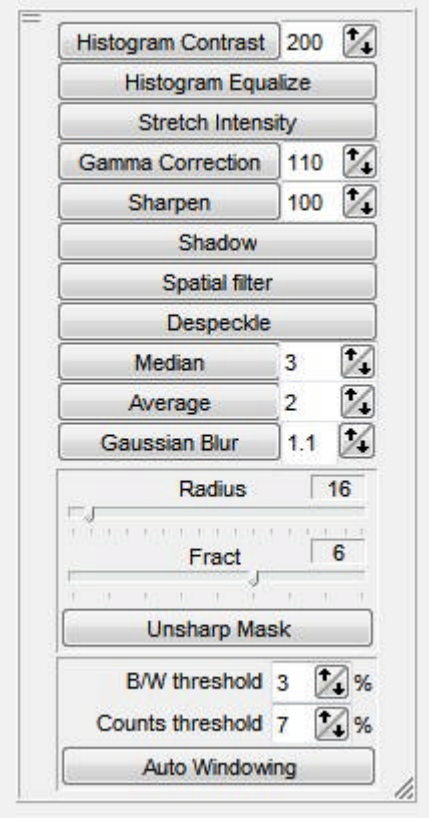
3.2.7 Working with filters

You have the possibility to tweak the image by using the **different filters** in Mediadent.

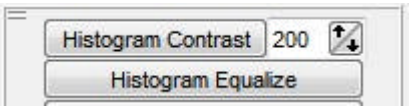
In this article you will learn about the different filters you can apply to your images in Mediadent.

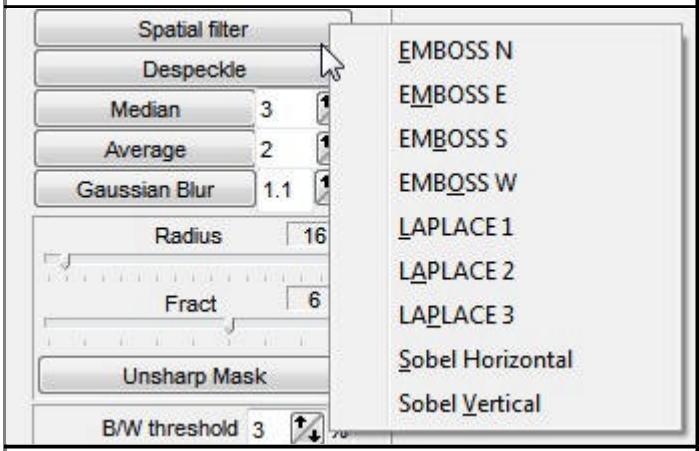
To activate the filter dialog box, click the **icon**

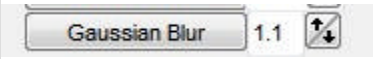
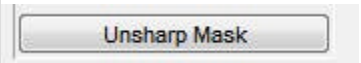
The **Filter dialog box** will appear with the different options you can use to modify your image.



This is an **advanced** feature, if you have made modification to your image by using the filter options, you can always **reload** your image by clicking on the following icon:

Option in Dialog box	Explanation
	Using the Histogram Contrast/Histogram Equalize If your scanned image appears **darker** that the original and you want to balance the values to produce a lighter image, you can use the **Histogram Equalize**. The Equalize command redistributes the brightness values of the pixels in an image, so that they more evenly represent the entire range of brightness levels. When you choose the command, the software finds the brightest and darkest values in the image and **averages** all the brightness values so that the darkest value represents black and the brightest value represents white. Together with the **Histogram Contrast** which does not affect the color balance of the image, you can see before and after brightness comparisons.

	Using the Stretch Intensity The Stretch intensity command performs the equivalent of the Levels slider adjustment **automatically**, these features automatically define the **lightest and darkest pixels** in each channel as white and black, then redistribute the intermediate pixel values proportionately. In general, the Auto feature gives good results when a simple contrast adjustment is needed to an image with an average distribution of pixel values. However, this feature does not provide the more precise control that can be achieved by adjusting the Levels or Curves controls manually.
	Using Gamma correction This is used to adjust the way the images are shown on the **monitor or printed out**. Minor color corrections can be made, depending which monitor you are using. Gamma corrections is the process of **adjusting your monitor** and the software color conversion settings, to compensate for factors that affect both the onscreen image and it's conversion to printed output.
	Using Sharpen For **blurry** images you can use the Sharpen filter. Sharpen filters focus blurry images by **increasing the contrast** of adjacent pixels. These include the Sharpen and Focus filters, both of which find the areas in the image where significant color changes occur (such as at the edges) and sharpen them.
	Spatial filters These are advanced filtering possibility. Press the **RIGHT** mouse button to get the list of advanced filters.
	Using Gaussian Blur Noise reduction can be used to remove

	problem areas from an image, such as electron **noise**, **dust** and **scratches**. Gaussian blur gives better results, due to the advanced formula, but this filter works slower.
	Using Unsharp Mask This filter is interesting for images you want to **print** or **view online**. Unsharp mask or **Focus** is a traditional film compositing technique used to **sharpen edges** in an image. The Unsharp Mask filter corrects **blurring** introduced during photographing, scanning, re-sampling or printing. Unsharp mask locates pixels that differ from surrounding pixels and increases the prixel's contrast by the amount you specify. In addition, you specify the radius of the region to which each pixel is compared. The effects of the Unsharp Mask filter are far more pronounced on-screen than in high-resolution output. If your final destination is print, experiment to determine what settings work best for you image. **Best setting for Focus:** • Hi-res image (3000 pixels H or V): • Radius: 16 • Fract: 6 • Decrease Radius, if the image is smaller (less pixels) • Decrease Fract if the filter is too strongly promounced.

If your images you acquire always need the **same adjustments**, it can be useful to use the **Optimize** option. This will apply **by default** the desired filters when selecting a certain Optimizer .

Read the article **'Working with the Optimize feature' (Section 3.2.8)**.

3.2.8 Working with the optimize feature

The Optimize feature is an **advanced** feature that allows you to **standardize** the filters (masks ...) that can be applied to your image.

Often after acquiring the images, additional manipulations are necessary to provide the clarity that is needed for detailed analysis. These manipulations can be automated through an

optimization profile.

You have for example the possibility to determine which filters you will apply by default when acquiring an image.

In Mediadent you can to configure **5 Optimization profiles**.

You will be able to **link** a certain Optimize profile to a particular **acquisition device**. Read more about this in the article **The optimize module (Section 8.1)**.

Action	Explanation
1. Apply Optimization profile 1	
Click on the icon in the Iconset and the **Optimization 1 profile** will be applied to the image. 	By default the **Optimization profile 1** is available in your Iconset. By clicking the icon a number of filters and/or actions will be applied to the image as configured in the Optimization profile 1.
2. Apply another Optimization filter	
Press and ***hold*** the **left** mouse button on the Optimization icon in the icon set. **Select** the Optimization profile you want to apply to your image. 	The Optimization icon will **expand** and you will get the **5 icons**. You will receive **5 icons (1 to 5)**, representing **5 Optimizations profiles** you can apply to the image.
Choose for example 5, this will apply the **Optimization profile 5** to the image. 	As an example choose Optimization profile 5 to test.

If you are not happy with the result of your optimizations, you have the possibility to re-load your **original image** by clicking ,the **re-load icon** in the iconset .

If you want to know how the optimization profiles are configured, read the following article: **The optimize module (Section 8.1)**.

The Optimization feature is related to the **filter** options.

The filter allows you to enhance the image on an ad hoc basis. Read more about this in the article: **Working with Filters (Section 3.2.7)**.

3.3 Working with the teeth scheme

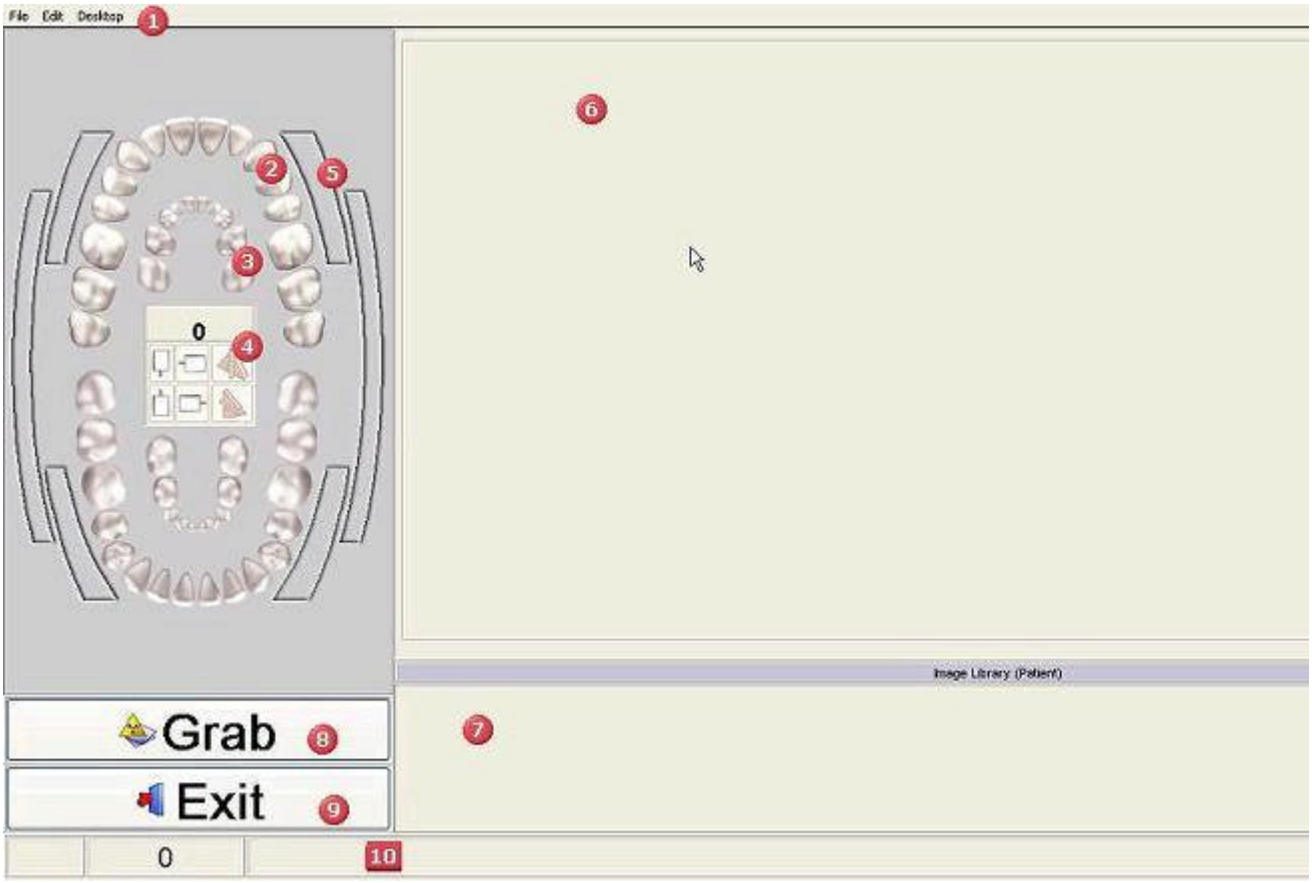
3.3.1 Working with the teeth scheme

Once you have selected to make an acquisition the status is presented with the teeth scheme.

In this screen you will indicate from which tooth or teeth you will make an image of.

This section will explain :

- **1. Overview of the screen**

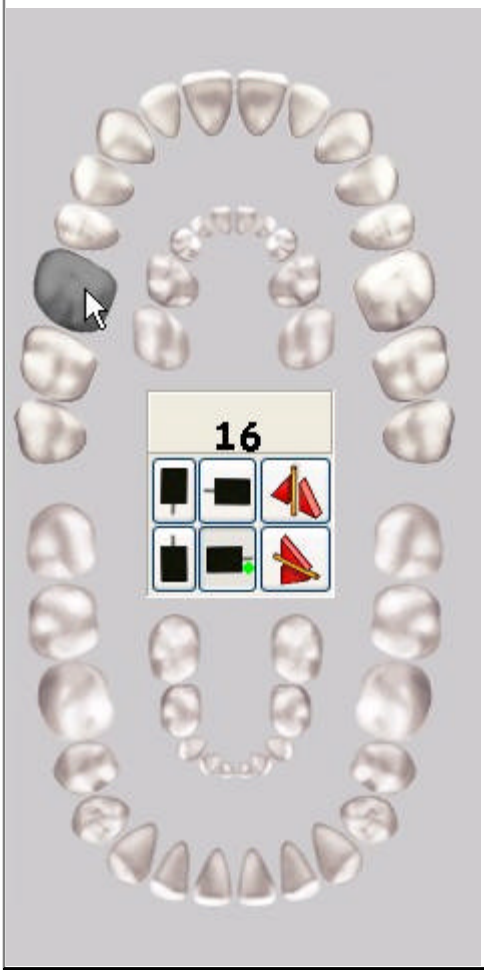
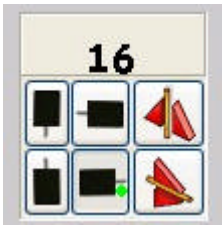


1	**Menu** of the Acquisition screen. See Also **Overview of Acquisition menu (on-line documentation)**.
2	Teeth scheme or status for an **adult**.
3	Teeth scheme or status for a **child**.
4	This small dialog box in the middle of the scheme will show the tooth or teeth that are selected, the sensor and the orientation. See Also **Manipulating sensor and orientation (Section 3.3.2)**.
5	The **Bite wing selector** gives you the possibility to select a bite wing.
6	The **Viewport** where the image will be loaded.
7	The **Image Library** where the images for the patient will be stored.
8	The **Grab** button will make the acquisition.
9	The **Exit** button will exit the acquisition module and will prompt you to save the images. See Also **Saving an image (Section 2.4)**.

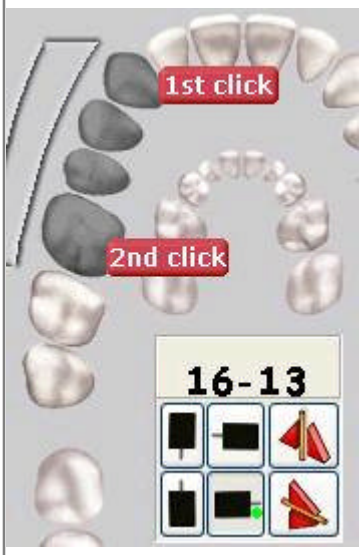
10	This is the **status line** it will show the name of the image and will also show the if the device is **Ready For Exposure.** If you are experiencing problems check the section **Troubleshooting (Section 6)**.
11	The little arrow will give you access to a **menu** allowing you to change the order in which the images are presented. See Also **Change the order of the images (on-line documentation)**.

2. Select the tooth, teeth or bitewing

Before you ***Grab*** an image it is important to **associate** a tooth, teeth or bitewing to the image. It will help you organize the Image library better.

Action	Explanation
Select 1 tooth	
Select the tooth (Click on the tooth with the left mouse button) in the status. 	You will see the selected tooth is now dark grey.  In the dialog box you will notice that **tooth 16** is selected. You now have the possibility to change the sensor and orientation. See Also **Manipulating sensor and orientation (Section 3.3.2)**.
Select more teeth	
Select the tooth **next** to the tooth you have selected previously. **Repeat** this process until you have selected the	

desired number of teeth.

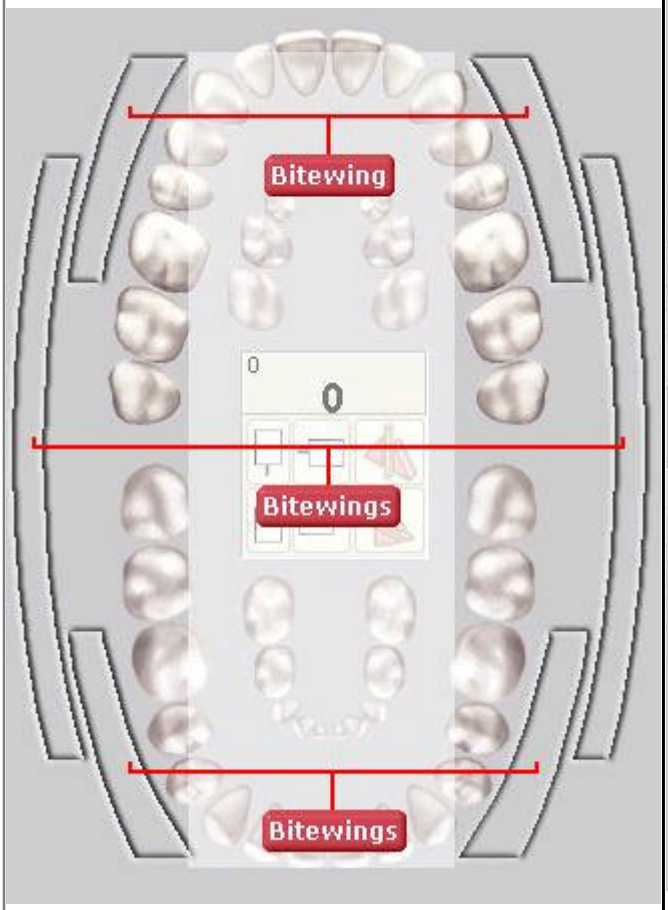


Select **4 consecutive teeth** by clicking on every tooth.

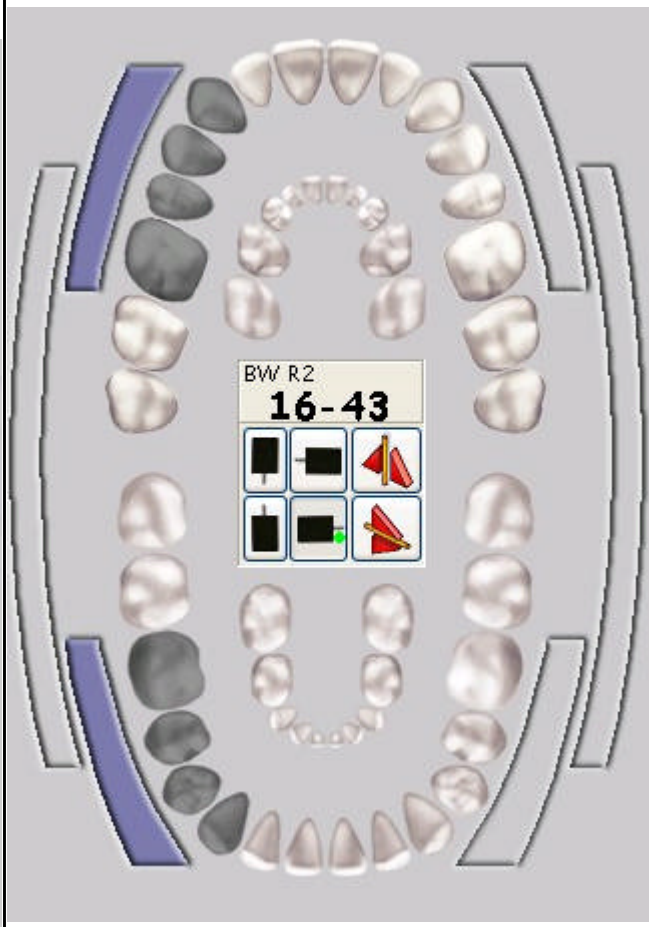
You can also click on the **first tooth** and the **last tooth**, automatically the teeth between will be selected.

Select a bitewing

Select one of the bitewings by clicking on the Bitewing bars.



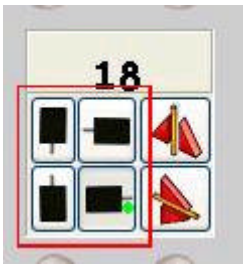
By **clicking** on the bars you will see the selected teeth.



Go back to the **topic** about **Acquisition (Section 2.2)** and follow the instructions to **Grab** the image (**2. Acquire an image / 3. Grab the image**)

3.3.2 Manipulating sensor and orientation

When you make an **acquisition** by means of the teeth scheme or status, you have the possibility to change the **orientation of the sensor**.



Click on the sensor buttons to **change** the sensor orientation. The option with the **green dot** is the active setting.

You can also flip the image from **Left to right** or **Top to bottom** .

The changes you make to the orientation of the sensor will be **saved** for the next time.

3.4 Working with the status mount

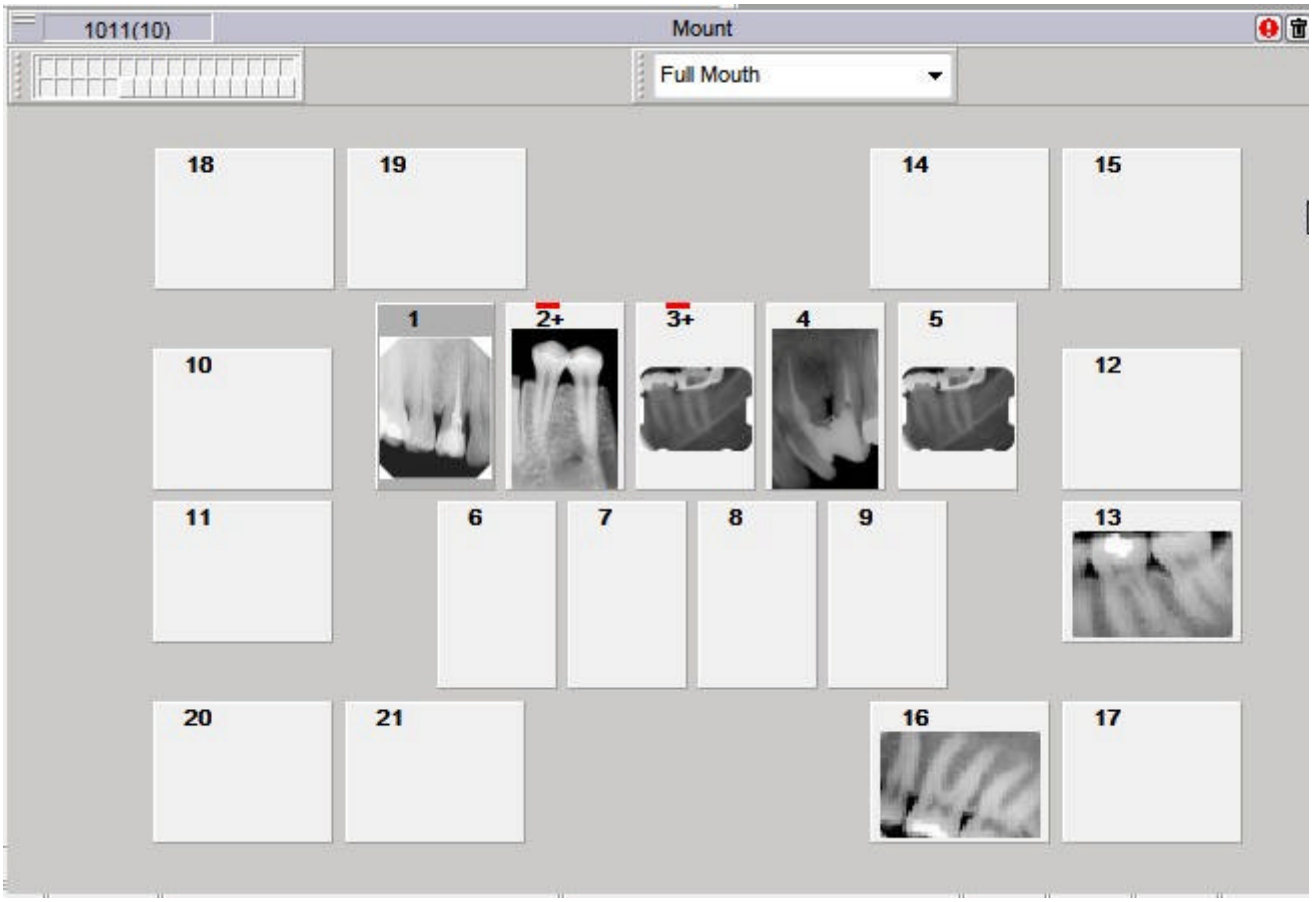
3.4.1 What is a Status Mount

In this topic we will explain the basics of an alternative way of working with your images.

The **Status Mount** is together with the **Image Library** a way to **organize** your images.

The images can be stored, modified or deleted in the Status Mount or the Image Library.

You can also use the Status Mount in **acquisition** mode. The images will be captured in the boxes.



Differences between the Image Library and the Status Mount

The **Image Library** is the main container where the images are stored in. The manipulations you do on the images in the Image Library are **permanent**. This means deleting an image in the Image Library will also result in the deletion of the image in the Status Mount. Removing an image from the Status Mount will not result in the deletion of the image.

Working with a Status Mount has a couple of **advantages:**

- You have the possibility to **automate** the image taking process. In some offices there is a **procedure** in place for taking pictures. For example in some cases it is common practice to take images of the full mouth. In that case it is very handy to be able to automate this.
- Another advantage of using the Status Mount is that you can automatically **associate** the tooth or teeth to the image. The name of the image will represent the tooth or teeth association.
- Also the **order** in which the pictures are taken can be determined in the Status Mount.
- If you take intra-oral images it is also possible to change the **orientation** (rotate 90° or flip horizontally or vertically) of the image in the Status Mount Box independent of the original image.

An example of a Status Mount scheme is the **AAO**. This scheme is used by the **American Academy of Orthodontists**.

If you want to know how you can **move images** from the Image library into the Status Mount, read the article : **Working with the Status Mount and the Image Library (Section 3.4.1)**.

Perhaps you want to **use** the Status Mount when you are acquiring an image, read the article : **Using the Status Mount in Acquisition Mode (Section 3.4.2)**.

Maybe you want to **create** your own Status Mount, read the How to article : **How to create a Status Mount (Section 4.5.1)**.

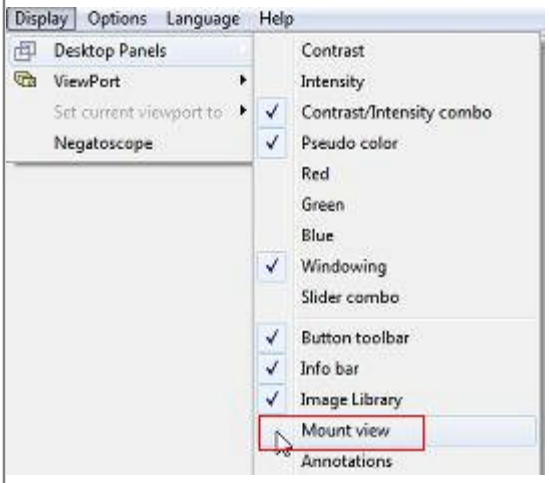
3.4.1 Working with the status mount and the image library

In this article we will explain how you can use the Status Mount. We will give an overview of the **screen elements** and explain the **Status Mount Controls** and **Submenu**.

We will also show you how you can **move** images from the Image Library to the Status Mount boxes.

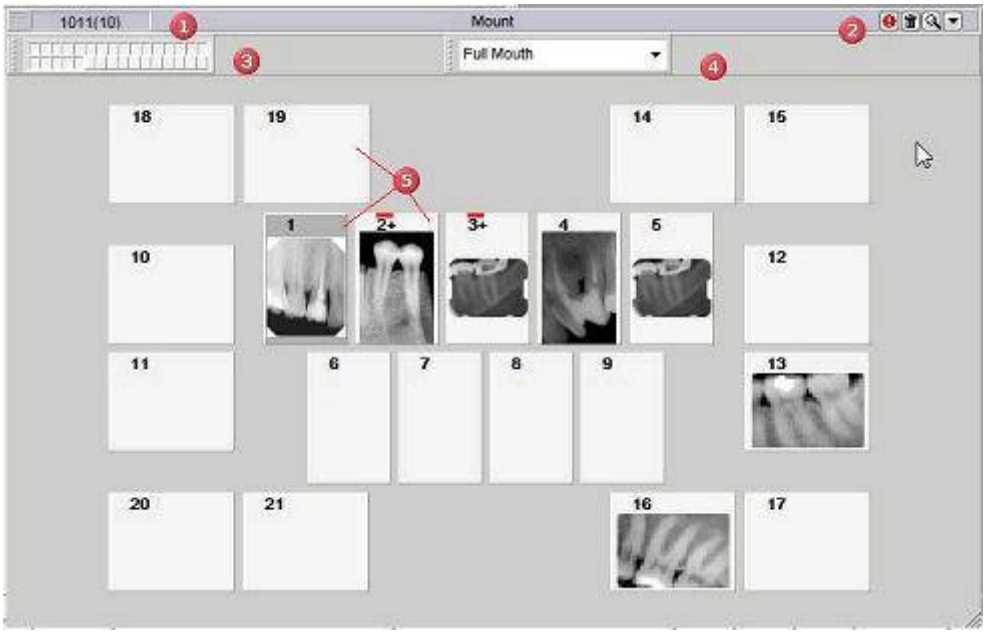
1. How to activate the Status Mount

There are **2 ways** to activate the Status Mount

Action	Explanation
In the Mediadent menu choose ***Display > Desktop Panels > Mount View***  ***-or-*** Choose the icon in the Icon set 	If you are not yet sure what the Status Mount can do for you, you can read this article: **A Status Mount (Section 9.3)**. If you want to move the Status mount dialog box you will need to **unlock** the desktop and **reposition** the dialog box. To learn more about the the **layout** of the desktop read the article **How to configure the desktop (Section 4.2.6)** topic **2. Change the desktop layout.**

The Status Mount will appear on your desktop and you will be able to view the different images in the Status Mount.

2. Overview Status Mount Screen

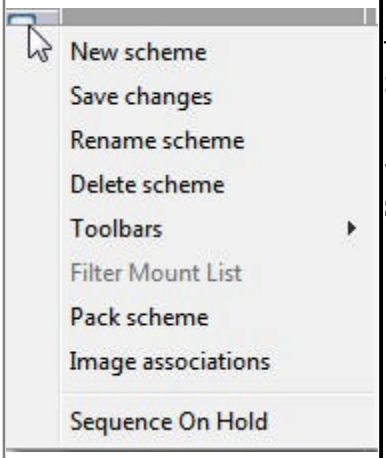


1	Identification of the patients
2	**Status Mount Controls**. You will have the possibility to start/stop the sequencing, deleting images from the Status mount boxes, filter images and access the Status Mount Submenu. Learn more about the Status Mount Controls in the topic: **Overview of the Status Mount controls**.
3	**Image container configurator**: This rectangular box contains 32 little boxes (or squares). Each little box represent a Status Mount **box**. When the little box is pressed-in it means the Status Mount box is visible on the screen. If not, it can be activated by pressing on the little box. This will be used when you want to **create your own Status Mount**. See the topic '**How to create a Status Mount. (Section 4.5.1)**'
4	The **Status Mount selector**. You will be able to select another Status Mount. By default there are a number of Status Mount schemes available for example the AAO, this is the Status Mount of the American Association of Orthodontists. You will also be able to select your own Status Mount.
5	On the screen you will see a number of boxes where the images can appear in. How to activate these boxes and change their configuration, you will read in the article **'How to create a Status Mount (Section 4.5.1)**.'

3. Overview Status Mount Controls

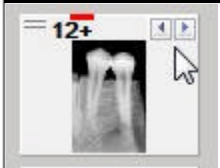
You will find the Status Mount Controls in the **top right hand corner** of the dialog box.

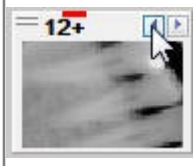
	Start/Stop Sequencing The Start/Stop icon will allow you to **temporarily stop** the sequence when taking images. This is used when you use the Status Mount in acquisition mode. To learn more about how to use the Status Mount in acquisition mode read the article: **Working with the status mount in acquisition mode (Section 3.4.2)**.
	Deleting

	This icon has the same usage as in the Image Library. When you **drag** an image on the Delete icon the image will be deleted. See the topic '**Working with the Image Library' (Section 3.5.3)**.
	Filter This icon will allow you to **filter** on different images, for example images taken on a specific date. It will allow to **search** through the images and filter out the relevant images based on **date, grade, user, type and keywords**. The usage of the icon can be found under the topic '**Searching images' (Section 4.3.3)**.
  	**Sub Menu** To show the **Status Mount sub menu** click on the small arrow in the right top corner of the Status Mount Dialog box. These menu options are used when you want to create your own Status Mount. We will explain these options in the topic : '**How to create a Status Mount' (Section 4.5.1)**.

4. Move an image from the Image Library to a Status Mount box

You have the possibility to move an image from the Image Library into one of the boxes in the Status Mount.

Action	Explanation
Display > Desktop Panels > Mount View or 	If you don't have the Status Mount screen on your desktop, you first have to activate the Status Mount via the Menu or my using the icon in the Iconset.
	**Select** the image in the Image library and **drag and hold** the left mouse button and point to the desired Status Mount box. When you release the mouse the image will appear in the Status Mount box.
	By repeating this process with other images, you have the ability to drag and drop more than 1 image on the same Status Mount box.

	By clicking on the **little arrows** you will be able to see the different images associated to that particular Status Mount box. Another indication is the **+-sign** next to the tooth number. This is an indication that there are more images associated to this Status Mount box.

Learn how the Status Mount can help you save time in **acquisition mode**: read the article : **Working with the status mount in acquisition mode (Section 3.4.2)**.

Maybe you want to **create** your own Status Mount, read the How to article : **How to create a Status Mount (Section 4.5.1)**.

3.4.2 Working with the status mount in acquisition mode

The **biggest advantages** of working with the Status Mount can be found when you are using it in **acquisition** mode.

In acquisition mode you will be able to **automatically** take pictures in a certain **sequence**, automatically **associate** a teeth or tooth to an image.

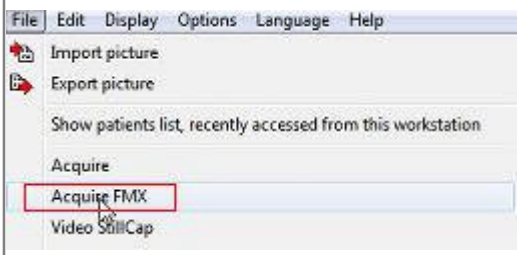
Especially in large offices with more practitioners it will allow you to **standardize** the way in which the images are taken.

Every practitioner will be able to use the same Status Mount so a standard set of images are taken for every patient.

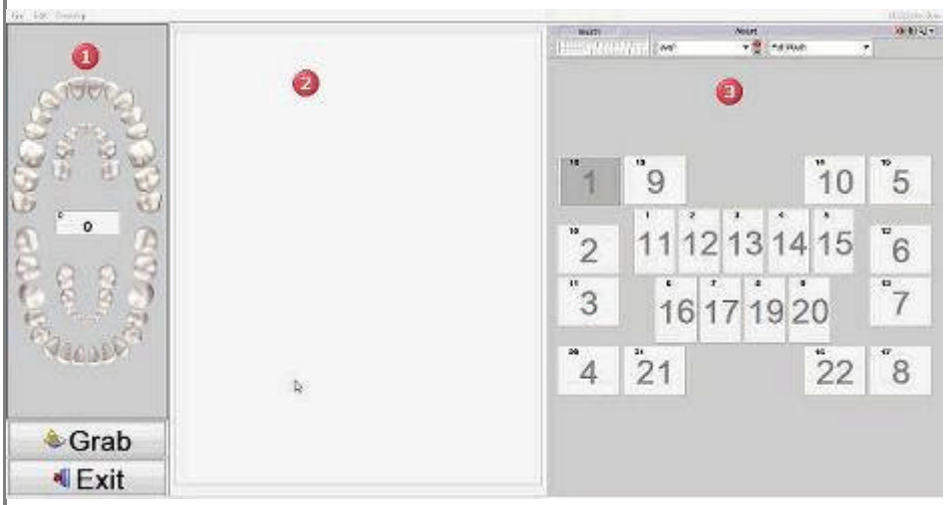
In this article we will explain how you can **use the Status Mount in Acquisition mode** and also how to select **another Status Mount** and use it.

The following steps explain **how to activate the Status Mount** in acquisition mode and how to **use** it for taking 3 images.

Remember that the screenshots of the Status Mount acquisition screen may differ from your environment. To follow the steps you can select the Demo Sensor, via the Mediadent menu ***Options>X-Ray Acquisition>X-Ray Demo Sensor***.

Action	Explanation
Choose in the Mediadent menu ***File > Acquire FMX***  **-or-** Click on the **icon** in the Icon set.	If you want to use the Status Mount in acquisition mode, you can go through the Mediadent **Menu** or choose the **icon** in the Iconset. FMX stands for Full Mount X-ray.

1. Overview Acquisition screen



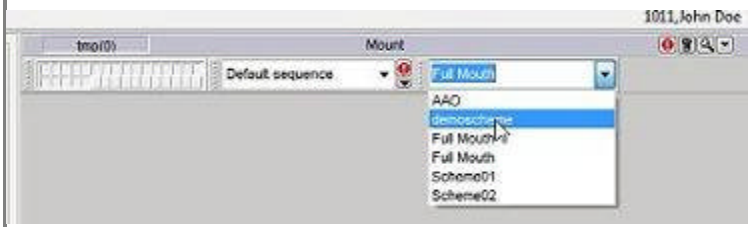
The acquisition dialog box has **3 parts** :

1. The teeth scheme
2. A viewport
3. The Status Mount

In the Status Mount you will see the different **Status Mount boxes** with large numbers and small numbers in them.

The **large numbers** is the **sequence** in which the images will be taken. The **small numbers** are the **tooth association** prepared in the teeth scheme.

2. Choose another Status Mount



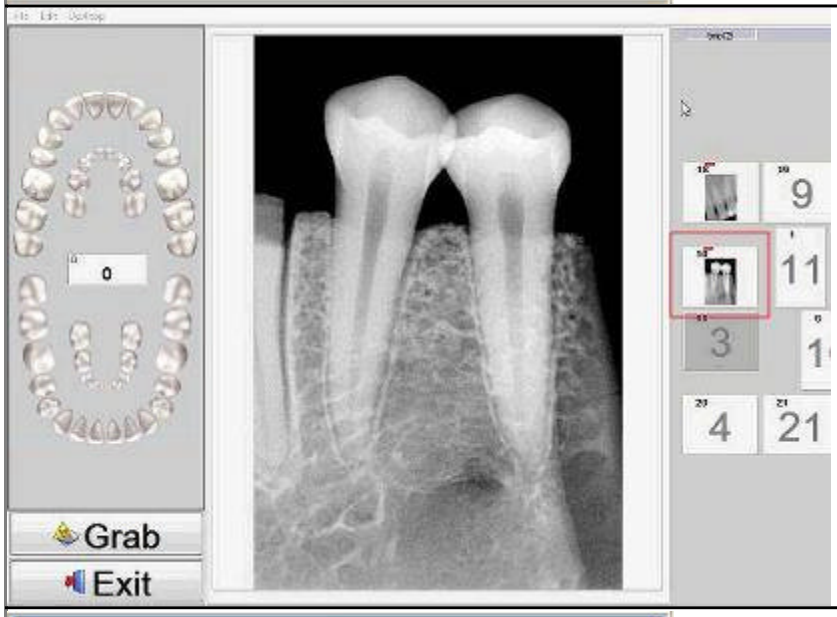
Verify or choose another **Status Mount**. The Status mount you choose will determine the sequence and the tooth association.

Once you have chosen the Status Mount and you have started the acquisition process, you can **no longer change** the sequence or tooth association.

In this **example** we will take 3 images of a patient.

Without changing anything in the software, the images will automatically appear in the boxes in the correct sequence.

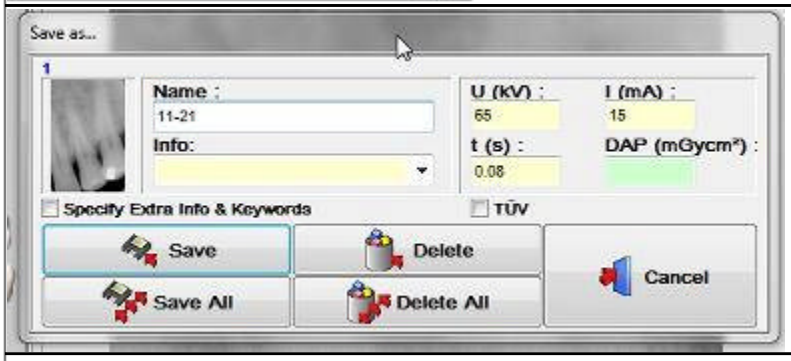
You will only need to **position** the acquisition device correctly..

	Position the acquisition device and click on the ***Grab*** button.
	You will see the image appear in the **box nr 1**. This is **tooth number** associated to this image is **number 18**.
	Click on the ***Grab*** button.
	The image will automatically appear in **box nr. 2.** The tooth association is tooth **number 10**.
	Click on the ***Grab*** button.

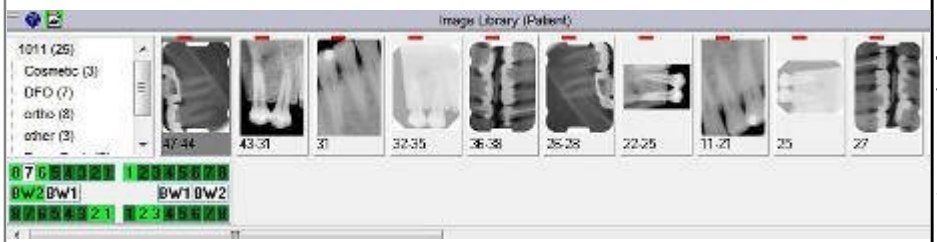
The image will automatically appear in the **box nr. 3**. The tooth association is tooth **number 11**.

3. Automatic tooth/teeth association when exiting the acquisition screen

When you **Exit** this screen you will be able to **save the images**.



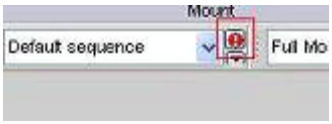
You have the possibility to **Save All** the images.



The images will be saved to the Image Library. Notice that the **name of the images** are the teeth that were associated in the Status Mount boxes.

When you activate the Status Mount you will see the images in the Status Mount.

If you are not happy with the quality of the image and you want to re-acquire the image in the **same** Status Mount box, you have the ability to STOP the sequence.

Click the ***Stop*** icon 

to stop the secquence and to re-acquire the image.

If you want to continue, click on the ***Stop*** icon and when you acquire the next image it will appear in the following Status Mount box.

If you want to learn how to create your own Status Mount, read the article **'How to create a Status Mount' (Section 4.5.1)**.

3.5 Working with the image library

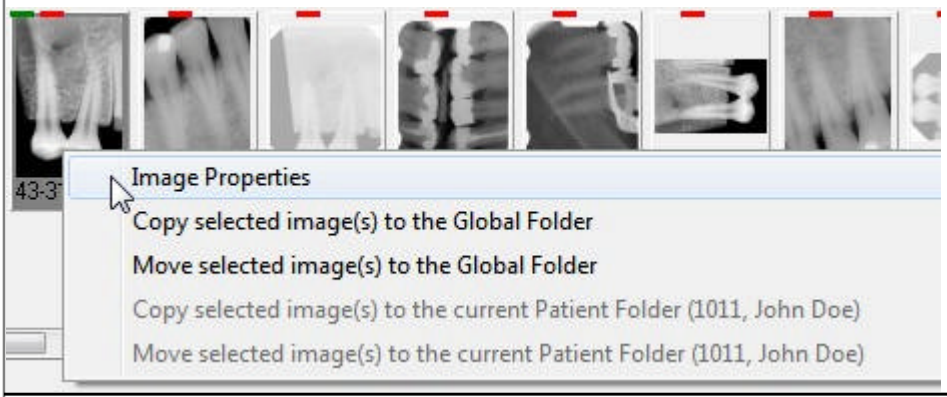
3.5.1 Overview of the image properties

The Image properties can give you some interesting information about the image. It will show you de different tags (keywords ...) that are associated with your image.

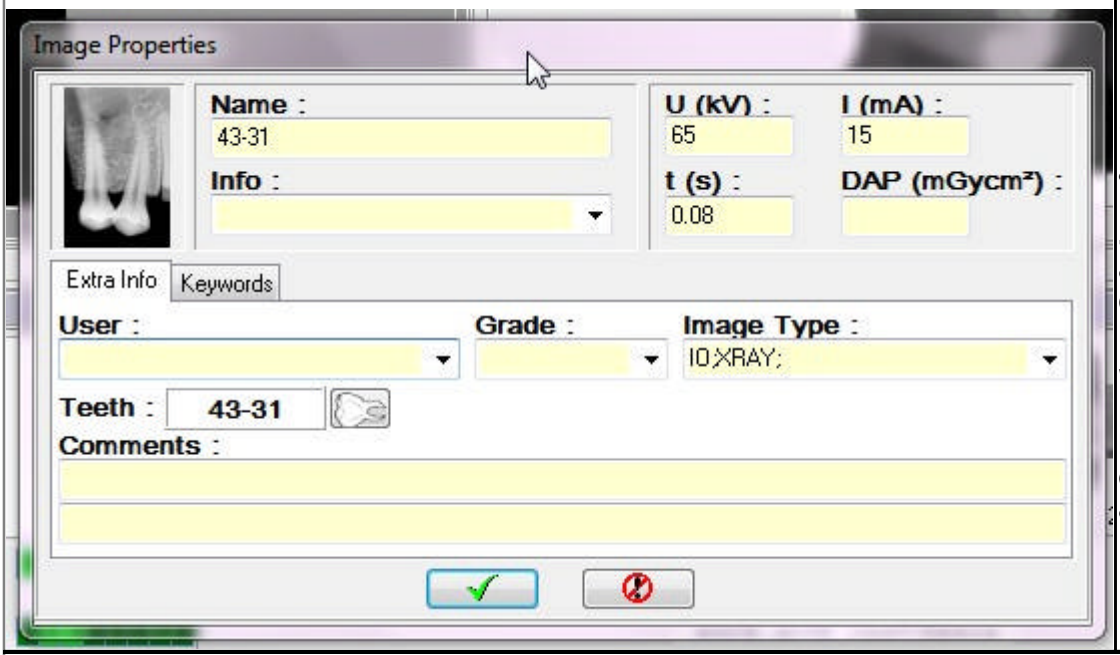
To get a better understanding of the extra information and keywords you can associate to an image, read the article **Specify Extra Info and Keywords (Section 3.5.2)**.

Not only when **saving** an image you can associate **Extra Information and Keywords** with an image also via the Image Properties you can **modify/add** the Extra Information or Keywords.

In this article you will see how to show the **Image Properties** and how you can **associate** a keyword to an image.

Action	Explanation
1. Go to the Image Library and select an image. 	To show the Ir Properties you to select an im the Image Libr
2. Click with the **RIGHT** mouse button on the image. 	Important is t with the **RIGH** mouse button, down menu wi appear where can select the Properties.

3. In the menu choose ***Image Properties.***

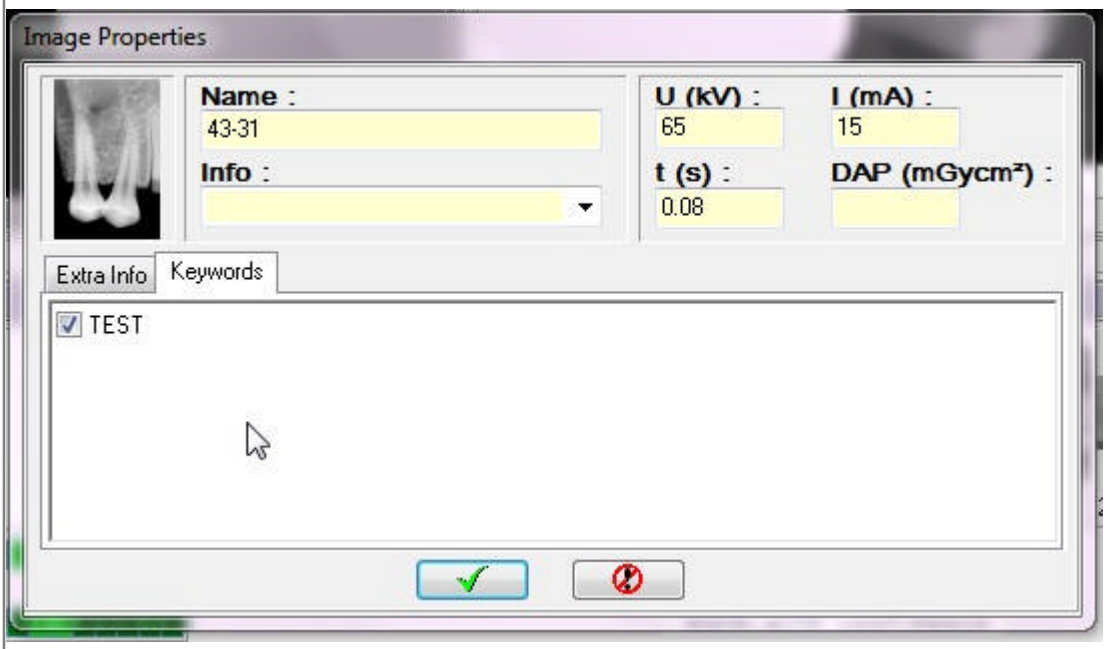


Read the artic
**'Specify Extr
and
Keywords' (S
3.5.2)** to lear
about the diffe
options in this
box.

Within the Ima
properties dial
box, you may
change the va
add keywords.

Example: Associate the keyword 'TEST' to an image

4. Select the tab '***Keywords'.***
5. Tick the '***TEST'*** keyword.



In this case I
associate the
keyword **'TES
the image for
reference.

6. ***Save*** the Image properties.

It is clear that you can define yourself which keywords can be associated. You will learn about

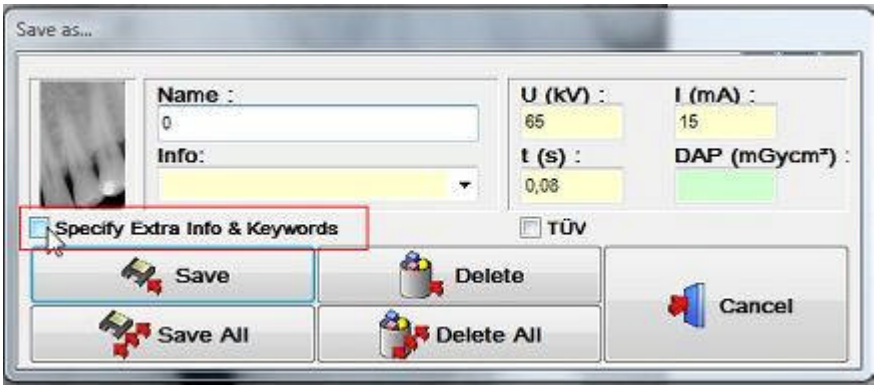
this in the article **Display Settings (Section 7.4)**.

3.5.2 Overview of the specific Extra Info and Keywords

You can **add extra information** when saving an image.

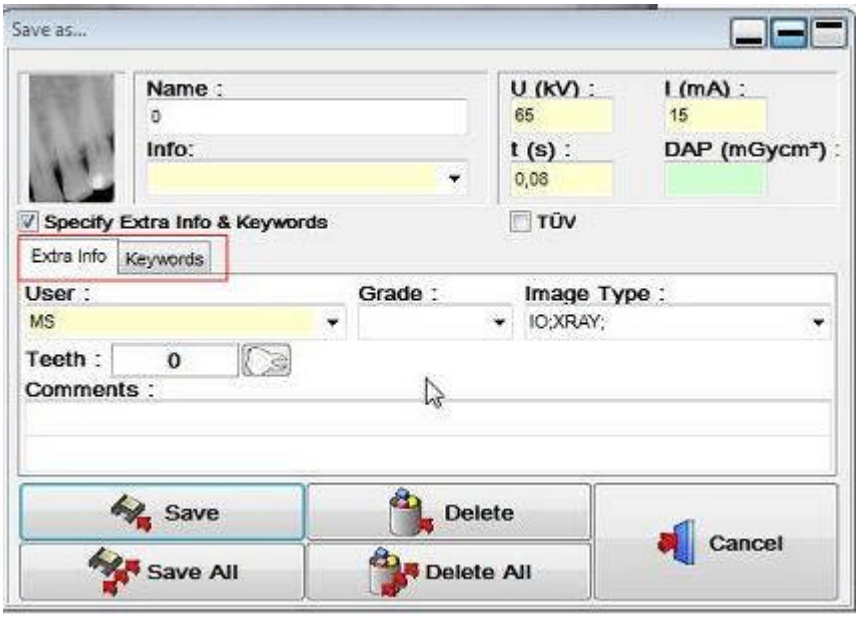
The advantage of adding extra information is that when searching for images, you can easily **search/filter** on the extra information you have added to the image.

To add 'Extra Info & Keywords' to the images during **saving**, you need to check the option '***Specify Extra Info & Keywords'***.



The screen will expand and you will see **2 tabs**

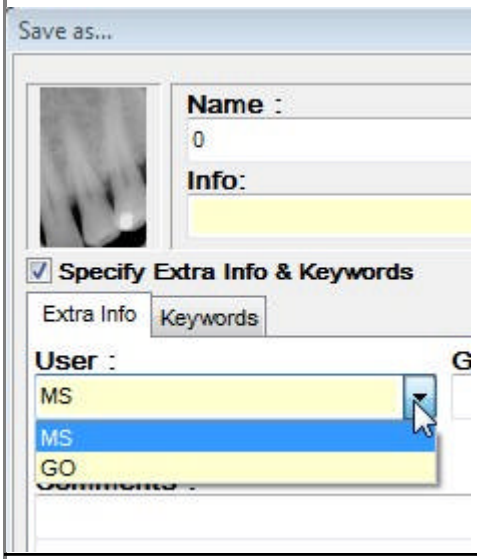
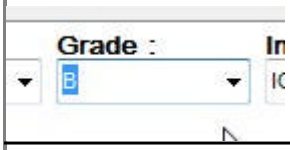
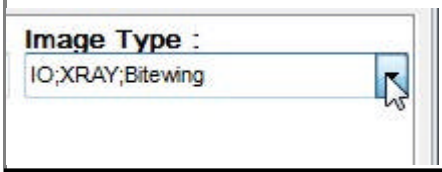
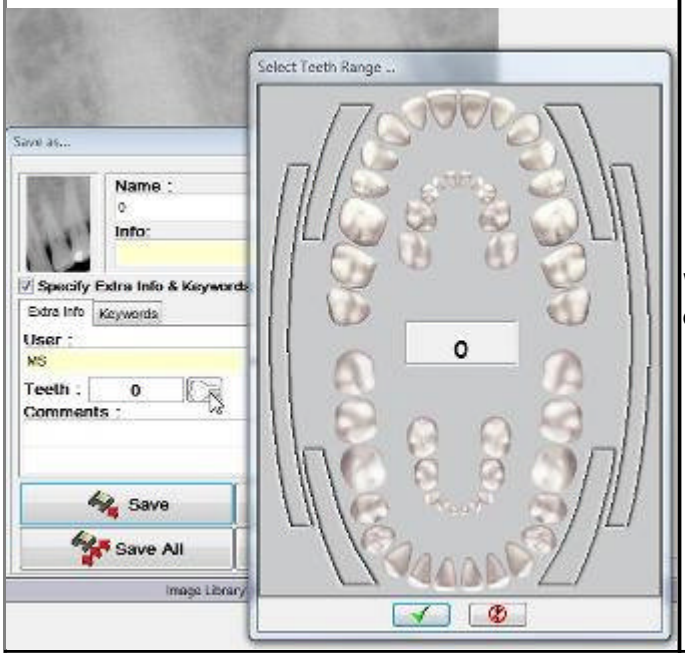
- Extra Info
- Keywords



1. Extra Info field

You are free to use the 'Extra Info' fields at your convenience. The interpretation of the fields depends on the way you want to classify the images. If you want to search on certain keywords, you can use these keywords in the **'Extra Info'** fields.

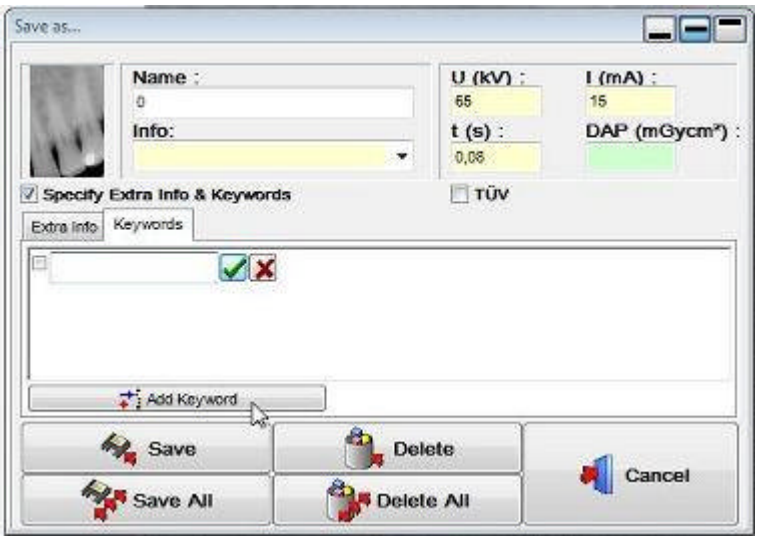
On the tab **'Extra Info'** you can add:

User 	You could use the **'User' field** to indicate for example the **dentist** who took the image. In the **setup** of Mediadent you can determine the users list. See the topic **Mediadent Setup:Display Settings. (Section 7.4)**
Grade 	You could use this field as a kind of **clasification** for the images. Standard the grades are A, B and C. This can be **adapted** via the **Mediadent Setup:Display Settings (Section 7.4)**.
Image Type 	Here you can indicate the **type of the image**. There are a number of presets already available when the product is installed. This can be **adapted** via the **Mediadent Setup:Display Settings (Section 7.4)**.
Teeth 	With this Info field you can indicate the **teeth or tooth** that is associated with the image.
	Free **comment** field you can use to add extra

Comments	information about the image.

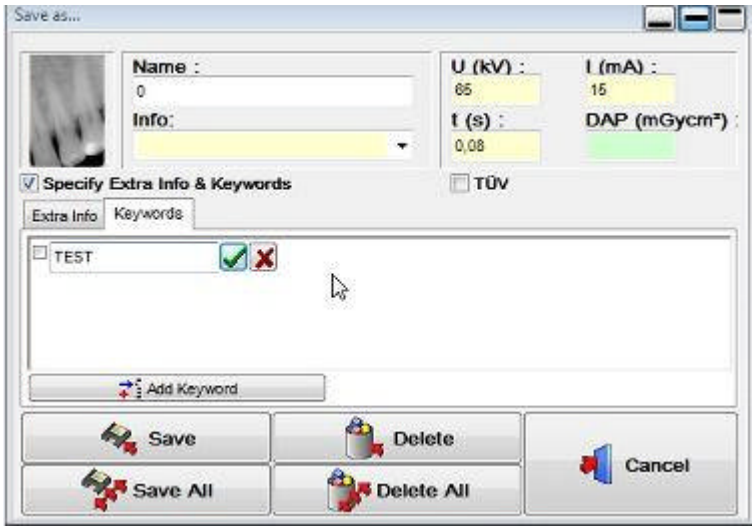
2. Keywords

The keywords tab allows you to add **extra keywords** to the image. The aim of these keywords is to be able to **search** on the keywords and find that associated images.



Follow these steps to add a keyword:

1. Type a ***keyword*** in the box. In this example **TEST** is the keyword.



2. ***Click*** to confirm.

The keyword **TEST** is now associated to the image.

It means you can now **search** for the keyword **TEST** and find the associated image.

Always ***SAVE*** the image after adding **Extra Info** or **Keywords.**

Read the article **'Searching images' (Section 4.3.3)** to learn how to search on the **Extra Information and/or Keywords** you have associated to the image during saving.

3.5.3 Working with the image library

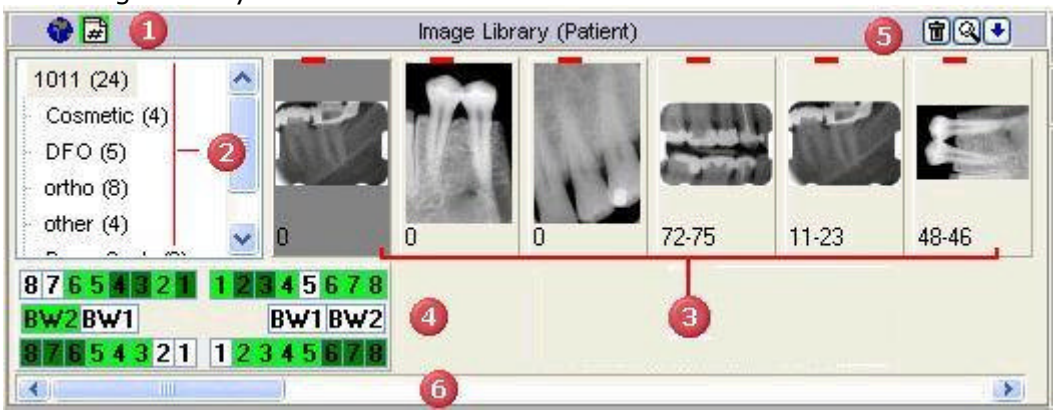
In this section we will explain the usage of the **Image Library**.

The Image Library will show the **images** taken for the selected **patient**.

In this article we will give you an overview of the **Image Library elements**.

1. Overview of the Image Library elements

This Image Library:



1	The Global Image Library The Patient Image Library Learn more about the differences in the topic **Global and patient library (Section 9.4)**
2	The sub-directories or folders contains the images of the patients. For better organization of the images you can create **new folders**.
3	You will see the **images** taken for that patient, depending on the **folder** you have selected.
4	Teeth scheme will show you which images are taken for that particular patient. When saving an image you will be able to associate teeth or tooth.
5	Folder or directory controls : You will be able to **delete** images, **search** for images and **sort** image in the Image Library. Learn more about searching images in the topic **Searching images (Section 4.3.3)**.
6	Scroll bar : If you have more images in the folder than can be shown on the screen, you can **scroll** to the right or left to see the images.

2. Structure of the patients library

The patient's directory contains the images you have taken.

The **root directory** is a number, in this example 1011.

Between brackets you see the number of images in the subdirectory or folder. In this case **(24)** means you have 24 images in that folder.

You can categorize the images in **subfolders** for example by **type**.

In this example you see several subdirectories :

- Cosmetic (4) : with 4 images
- DFO (5) : with 5 images
- ortho (8) : with 8 images
- other (4) : with 4 images
- Pano-Ceph (8) : with 8 images
- Video (3) : with 3 images

3. Select a folder

Click on the **folder** to select.

For **example** : When I click on the **ortho (8)** subdirectory, I will see the images.

4. Legend of the images (colored bars/lines on top op images)

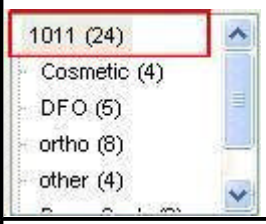
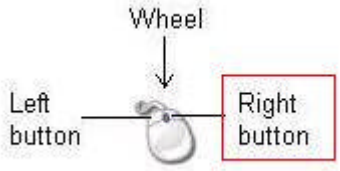
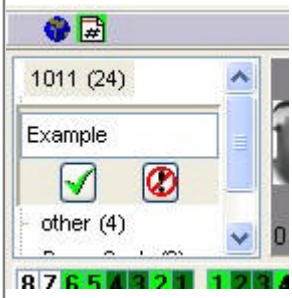
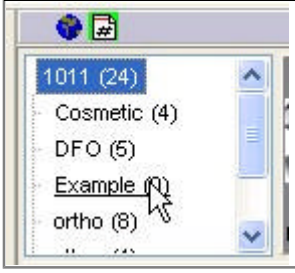
You might notice **little colored lines or bars** on the top of an image.

Every color has it's own meaning. In this table you will get an explanation of the different lines or bars.

	The little **green** line on top of the image is an indication that there are **annotations** for that image. The little **blue** line on top of the image is an indication that there are **DFO analysis** for that image. **RSP** is the name of the picture. You will give this name when you **save** the image.
	The little **red** line on top of the image is an indication that the **actual** image is the **original** image. **72-75** is the name of the picture, in this example the numbers of the teeth 72 to 75. You will give this name when you **save** the image.
	The **yellow** line indicates that the image has been **modified**.

5. Create a new subdirectory or subfolder

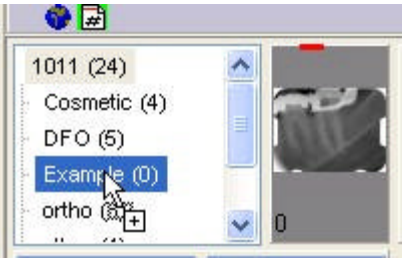
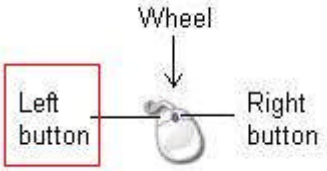
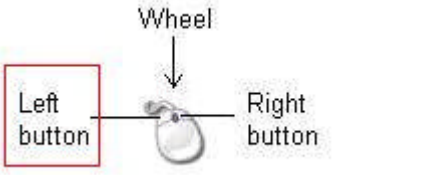
Action	Explanation

1. To create a **new subdirectory** you first have to ***select*** the **root directory** by **clicking** on it.	For example : Click on **1011 (24)** 
2. Click with the **Right** mouse button on the root directory to obtain a **menu.** 3. Choose **Add folder**	
4. Give the subdirectory a **name.** 	For example : ***Example***
5. Click to confirm.	.
	The **new subdirectory** is created and will appear in the list.

You have the possibility to automatically create the same structure for all the patients. This means you will have the same sub-directories for every patient. You will find the explanation in the Mediadent Setup : **Display Settings (Section 7.4)**

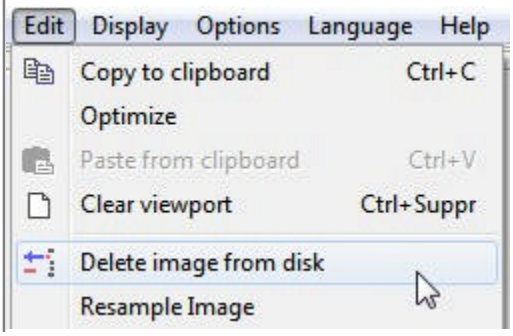
6. Move or Copy an image to another folder

MOVE AND COPY		

Click on the image with **left** mouse button, **HOLD and DRAG** the image to another subdirectory		You will move a copy of the image to another subdirectory by dragging and dropping the image with you left mouse button. 
MOVE ONLY		
Click on the image with the **left** mouse button, **HOLD**, press the **SHIFT** key and **DRAG** the image to another subdirectory.		

7. Deleting images

There are **2 ways** to delete an image.

Action	Explanation
1. Select the image you want to delete 2. ***Drag and drop*** the image on the ***recyclebin*** icon in the image library 3. Choose ***OK*** in the warning dialog box to confirm	You drag and drop the image while pressing and holding the LEFT mouse button to move the image to the recycle bin.
1. Load the image you want to delete in the **Viewport** 2. In the menu ***Edit>Delete Image from disk*** 	This will delete the image permanently. You can avoid this by selecting the option **'Delete files to recyclebin'** in the Setup of Mediadent.

3. Klik ***OK*** to confirm	

3.6 Working with Mediadent Modules

3.6.1 Working with the reporter module

The reporter module is an additional module that allows you to create **standard** letters that can be used to send to patients / doctors / hospitals …

It is a module that is sold separately. You can always **contact us (Section 10)** for more information about this module.

Advantages of working with the Reporter module:

- It is a practical module, because it offers standard **word processor capabilities** without leaving Mediadent.

- All the related **communication** is stored in the **patient's file**. This makes it easy to follow up the patient's history. Some examples of communication are referral letters, documents for insurance, invitations for consultations etc …

- The **standard document** you create in Mediadent contains fixed text that can be re-used for all your patients. The standard document can contain your logo, your address and some standard text that is specific to that document. This standard document is called a **template** in Mediadent. The advantage is that you don't have to re-type the fixed text, but just fill in the variable text like for example the diagnoses of your patient. It can also contain information that is stored in your Patient Management System like the patient's name, date of birth, address etc …

In this article you will get a better understanding of the Report module in the **first topic** 'Overview of the Report Module'. In the **second topic** you will learn the basics of working with the Report module. In the **third topic** you will learn how to create a standard document or template in the Reporter module.

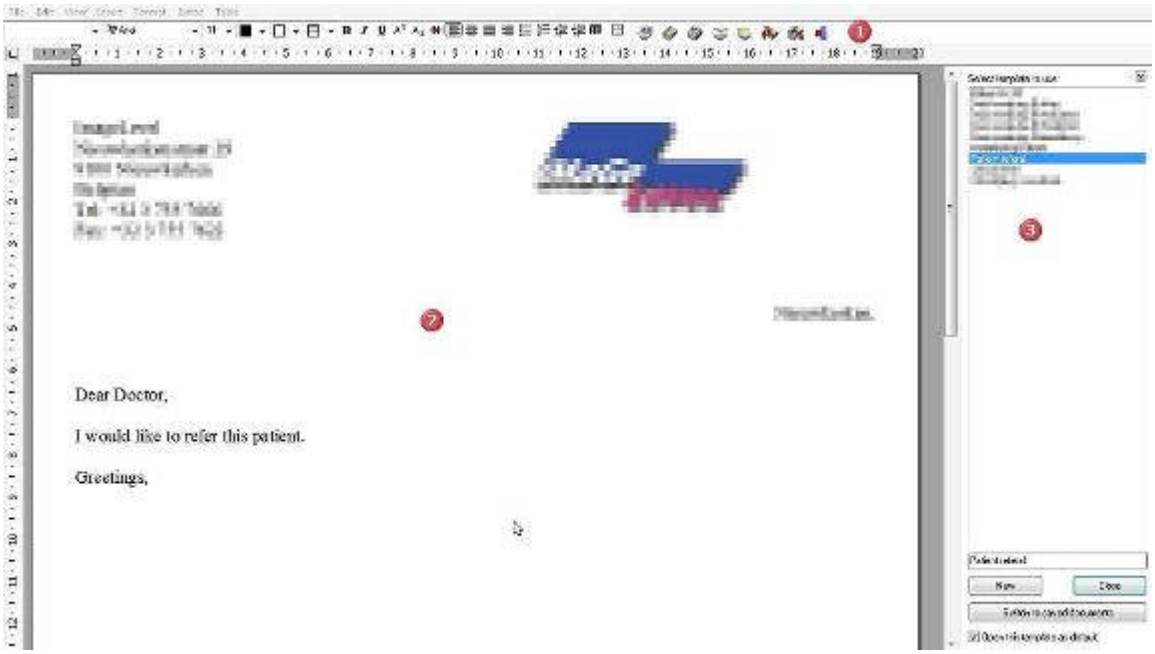
The **Reporter module** is loaded by clicking on the Reporter icon in the icon set

-or-

Choose ***File>Reporter*** in the Mediadent menu.

If the icon has a **green glow** it means there are already documents available in the Reporter module for this patient.

1. Overview of the Report Module



The **Report Module** offers basic **word processor** capabilities within Mediadent for the purpose of writing letters, referrals etc.. .

The **menu** contains the most functionality you will find in a word processor (Word Processor icons).

We will explain the topics which are unique to the Reporter Module, we will not explain the basic word processor functionality.

1 The icon bar contains traditional word processor icons such as font type, font size, font color, bold, italic, underline … and typical icons related to the Report Module.

2 The middle part of the screen is the standard document or template with the **fixed text**.

3 On the right hand side you will see a **Task pane**. This pane contains a list of standard documents or templates you can choose from.

1	This is the list of standard documents or **templates**.

2	Name of the template that will be used to name the document.
3	The New button will create a **blanc document**. You can use this button if you want to create a document without using a template.
4	The **Close** button will close the Task pane
5	Switch to **saved documents** will present a list with the documents that were already create for this patient.

If you want the Report Module to open with a **particular template**, you can **select** the template and check the option ***'Open this template as default'***.

2. Overview of the Report module icons

Type your Drop Down Section text here.

1	The **Status Mount** will appear and you will be able to **add images** from the Status Mount in your documents.
2	The **Image Library** will appear and you will be able to **add images** from the Image Library in your documents.
3	You will **print** the document, this icon is the equivalent of the Quick print and will print the document to the standard printer.

4	Sent the document as an attachment to an **e-mail**. It is clear that you need an **e-mail application** that allows you to sent e-mails.
5	This icon will allow you to create a **new document** based on the selected template.
6	This icon will allow you to open a previous created **document** related to this patient.
7	By clicking this icon you will **save** the document.
8	This icon will **Exit** the Reporter Module.

3. Working with the Report Module

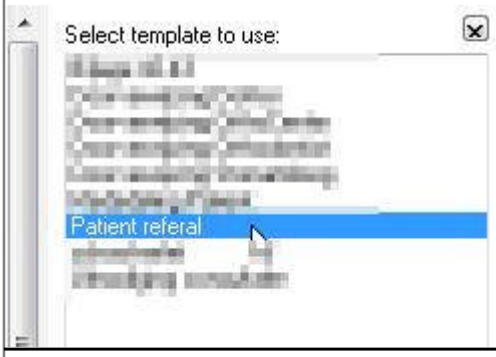
In this topic we will explain how to work with the **Reporter Module**.

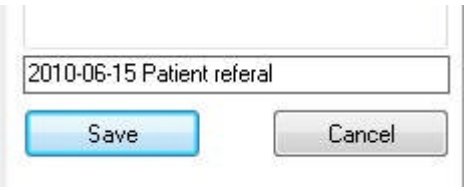
We will first explain how to create a document based on existing templates. We will also show what the **different possibilities** are to modify the documents, like adding pictures from Mediadent but also from outside Mediadent.

The **Auto Text** feature of the reporter is a real time saver! It will allow you to create a list of abbreviations that are automatically replaced in your documents. For example you will be able to add technical terminology to this list.

Of course you want to **share** these documents with your patients or colleagues in the last topic we will discuss how you can sent the document by e-mail, print the document or save the document as PDF.

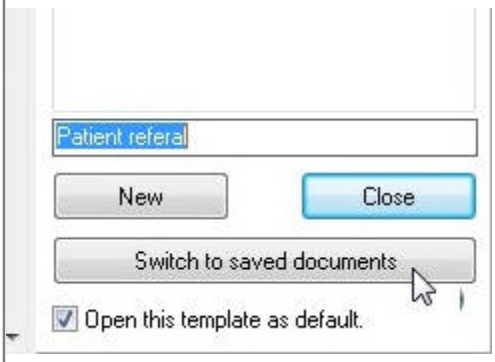
3.1. Create a new document based on a template

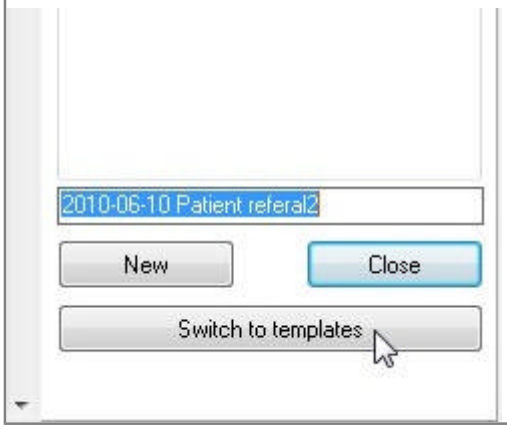
Action	Explanation
Launch the **Reporter Module** by clicking on the icon or Choose ***File > Reporter*** in the Mediadent menu	.
To use one of the templates in the Reporter Module just select one of the templates in the list. 	I would like to use the **patient referal** template.
Dear Doctor, I would like to refer this patient. This is a problem. Greetings,	In the middle of the screen the document will appear with the fixed text. You can now add comments to the document like the diagnoses or any remarks about this patient.

Give your document a **name**  and click the ***Save*** button. Choose ***Yes*** to confirm to save the changes.	Always save the document when you make changes. Once you have given the document a name, it will appear in the saved documents **list**.

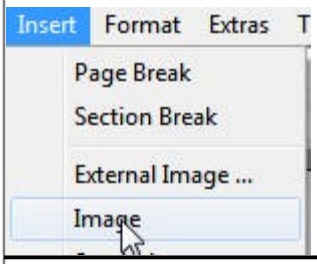
3.2. Modifying an existing document

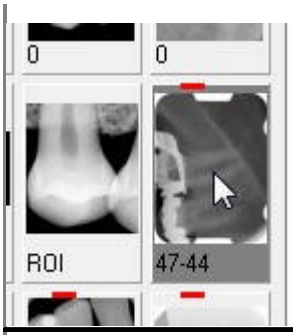
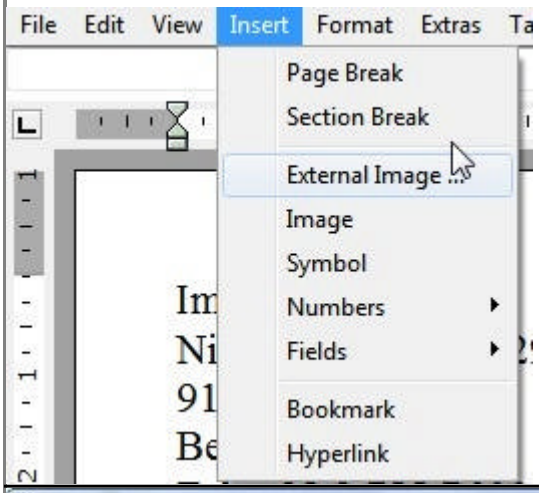
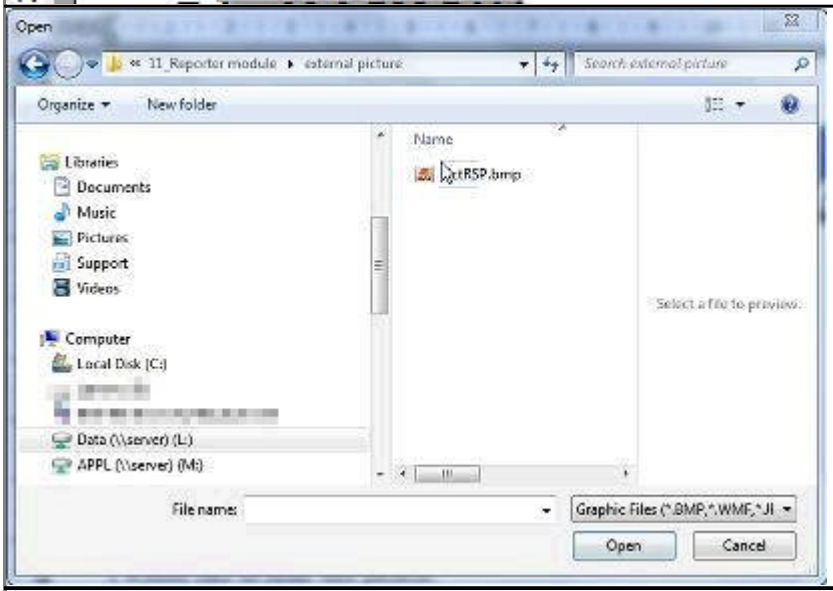
Once you have created a document for a particular patient, you may want to modify the existing text.

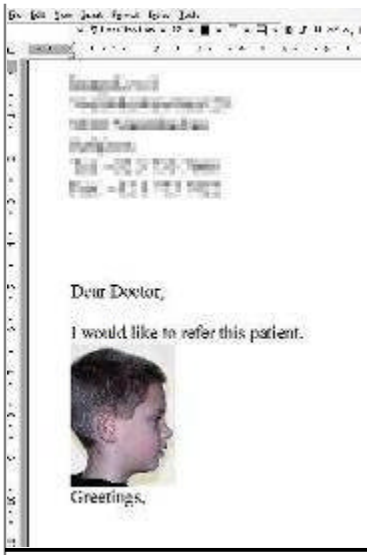
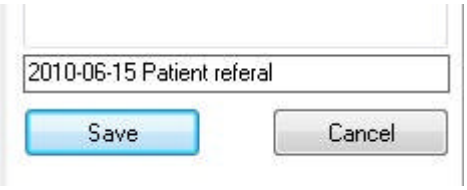
Action	Explanation
Launch the **Reporter Module** by clicking on the icon or Choose ***File > Reporter*** in the Mediadent menu	On the **right side of the screen** you will see a Task pane. The task pane contains a list of templates you can choose from to create a new document for that particular patient. At the bottom of the Task pane you will get the opportunity to switch to the saved documents.
Click on the button ***'Switch to saved documents'***  Choose the document from the list of saved documents. Make the modifications. **Save** the document.	You will see a list of all the related documents created for that particular patient. Saving the document will **overwrite** the existing letter. If you want to prevent the document from being overwritten, you can choose ***File > Save As*** form the Reporter module menu and give the document another name.
To create a **new document** based on a template Click on the button ***'Switch to***	

templates' 	You will get the list with the templates to choose from.

3.3. Adding images to your document

Action	Explanation
You can add **2 types of images** to your documents 1. Images from the patient's Image Library 2. Images outside of Mediadent	.
1. Adding an image from the Image Library to a document	
To add an image from the patient's Image Library, position your cursor in the document where you want to add the image. Choose ***Insert > Image*** 	.
	You will see a box appearing in the document with a number in it, this is the **placeholder*** and indicates the position of the image. *The placeholder is a grey box with a number in it.
To add a picture from the patient, call the **patient's library** by clicking on the icon in the Report module icon bar. 	You can also choose to use the **Status Mount** to select images from.
Double click on the image in the Image Library to insert the image in the document.	The Image Library will appear. When double clicking on the

	image you will see that the placeholder is replaced by the image.
2. Adding an image outside of Mediadent	
Maybe you want to add pictures which are not stored in the Image Library. You can integrate .BMP, .WMF,.JPG,.GIF and .PNG files in your communication	
In the Reporter Menu choose ***Insert>External Image*** 	**Position** the cursor in the document where you want to add the external image.
	Select the image/picture.

	Maybe the image is to big to fit on the first page, then resize the image accordingly.
Give your document a **name**  and click the ***Save*** button. Choose ***Yes*** to confirm to save the changes.	Always **save** the document when you make changes. Once you have given the document a name, it will appear in the saved documents **list**.

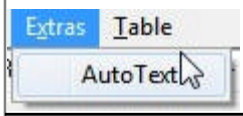
3.4. Using the Autotext feature

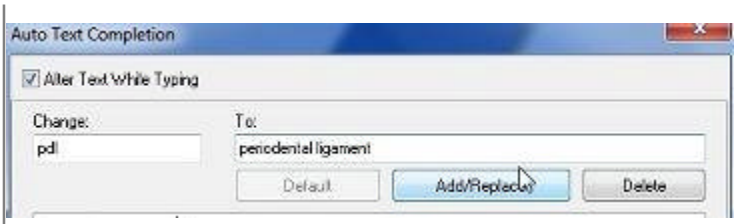
The AutoText feature is very practical because it can provides you with a list of texts you can re-use. It is based on the AutoText feature of a standard word processor. The principle is that you type in an abbreviation that is replaced with the complete text.

For example you type **dc** in your document and **dental caries** will automatically appear in the document.

You can create your own list with abbreviations and full text to make it easy for you to create your documents.

In the example we will show how to create an Autotext for periodental ligament.

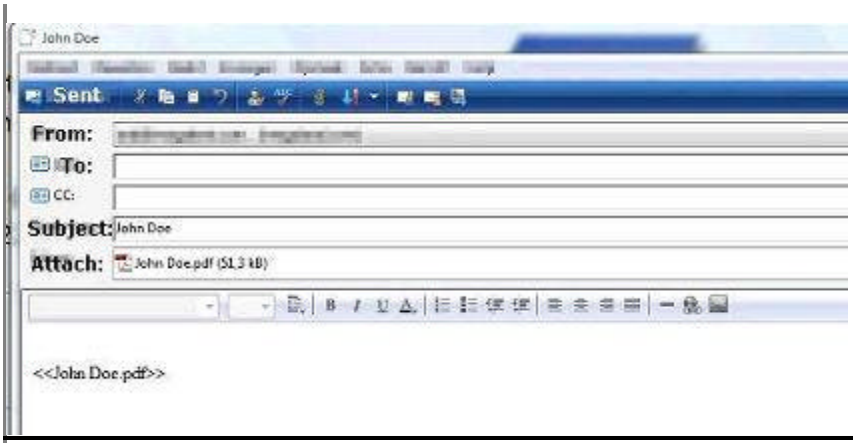
Action	Explanation
To activate the Auto Text feature, choose ***Extras > AutoText*** 	The 'Auto Text Completion' dialog box appears.
Type ***pdl*** in the **Change:** field and ***periodental ligament*** in the **To:** field.	Since the box **'Alter Text While Typing'** is checked, everytime you type one of the abbreviations in the list, it will be replaced by the full text.

	
Choose ***Add/Replace*** 	The Auto Text will appear in the list and is ready for use.
In your document, type **'pdl'** I would like to refer this patient. pdl Greetings,	So when you type **'pdl'** in your document, it will be replaced by the text **'periodental ligament'**.
Dear Doctor, I would like to refer this patient. periodental ligament	After you hit the **space bar**, the text will be replaced. You will save a lot of time once you have created your own list with abbreviations.

3.5. Different ways to share your document

There are **different ways** to share your documents:
- You can sent them by e-mail
- Print your document and sent it by mail
- Save the document as a PDF file and copy it to another computer

Action	Explanation
1. Sent the document by e-mail	
Click on the **e-mail icon** in the Reporter module icon bar or choose ***File > Mail To*** in the Reporter module menu 	Make sure your e-mail program is correctly working.
Fill in the recipient's name and sent the message	



You will notice the document is automatically attached and converted to a PDF file.

You just need to fill in the recipient's name and sent the message.

2. Print the document

Select the document you want to print.

Click on the ***print icon*** in the Reporter Module icon bar

or

choose ***File > Print***

These options will print the document to the standard printer.

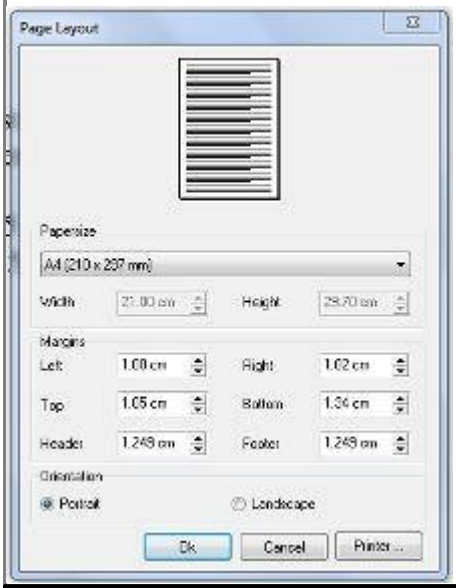
If you want to select **another printer** than the standard printer, choose ***File > Print ...***

When you choose this options, you will get the printer dialog box so you can change the printer settings.

Before printing, you can always get a preview of your document by choosing ***File > Preview***.

Changing the Paper Size, margins, orientation of the document can be done via the option

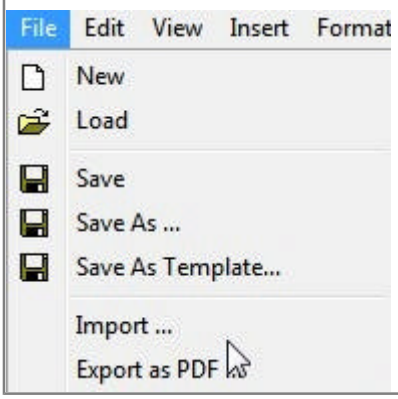
File > Page Setup



Dialog box to change the page settings.

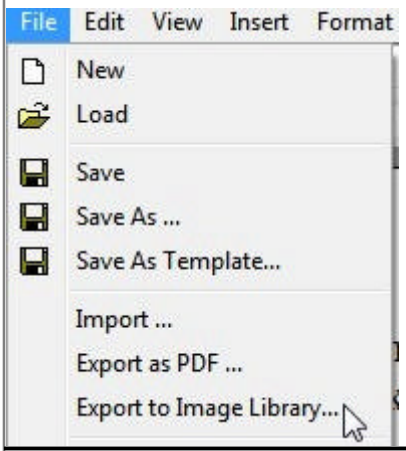
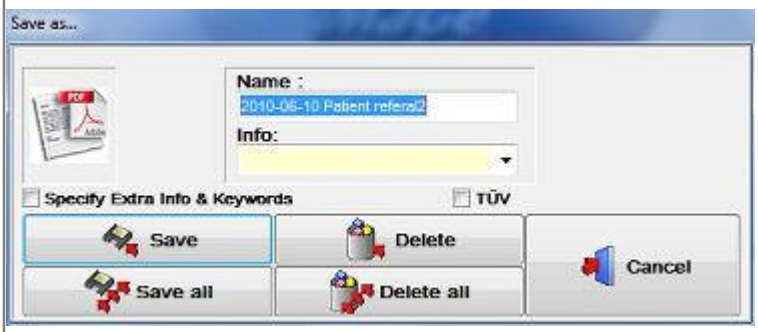
3. Save the document as PDF

Select the letter you want to save as PDF.

Choose ***File > Save As PDF*** in the Reporter menu 	If you want to share your document and you don't want anybody to change it afterwards or your recepient does not have Word, you have the possibility to save your document in pdf format.

3.6. Show documents in the patients Image Library

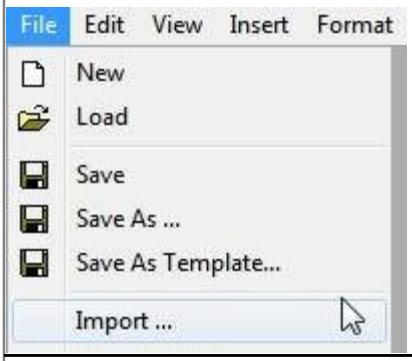
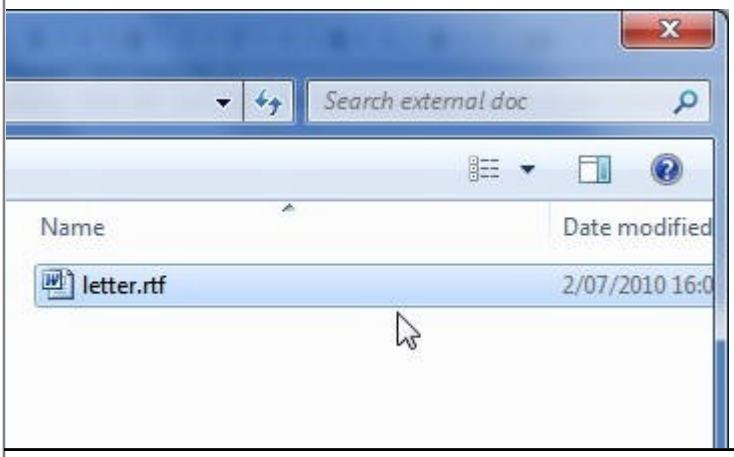
If you want the document to appear together with your images in the Image Library you can choose to export the document to the Image Library.

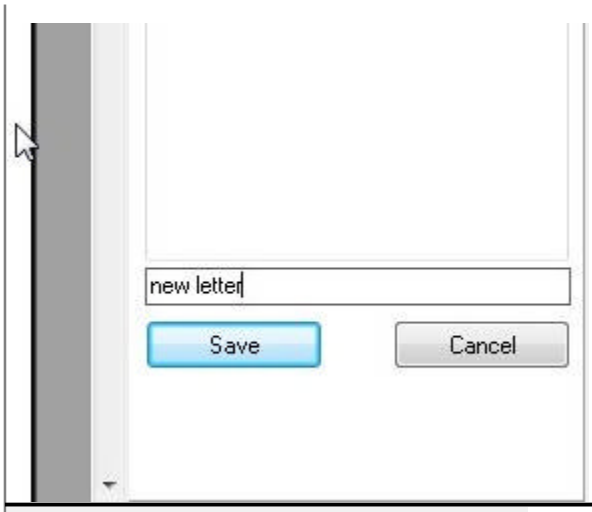
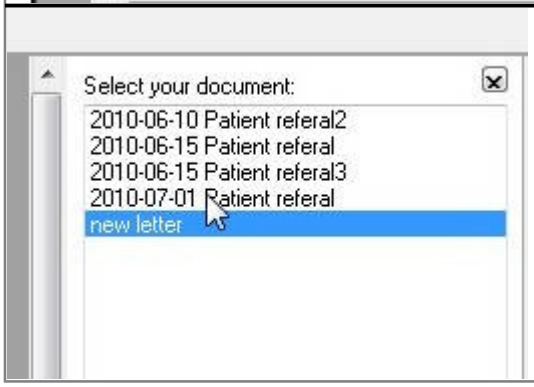
Action	Explanation
Select the document you want to export to the Image Library.	.
Choose ***File > Export to Image Library ...*** in the Reporter module menu 	.
Give the document a name  Choose the ***Save*** button	You will need to give the document a name.

	This image will appear as a PDF file in the Image Library.

3.7. Importing existing documents

If you have already created documents, you will be able to import them in the Report Module.

Action	Explanation
Choose the option ***File > Import*** from the Reporter module menu. 	Files in **RTF format (Rich Text Format)** can be imported into the Reporter module.
Choose the **file** you want to import. 	.
Click on the ***Save*** icon in the iconbar. Give the imported document a name.	The document will appear in the **Reporter module**. You will need to **save** the document

	and give it a **name**.
	The new imported document will appear in the list of **Saved document for this patient**.

4. Creating templates in the Report Module

Type your Drop Down Section text here.

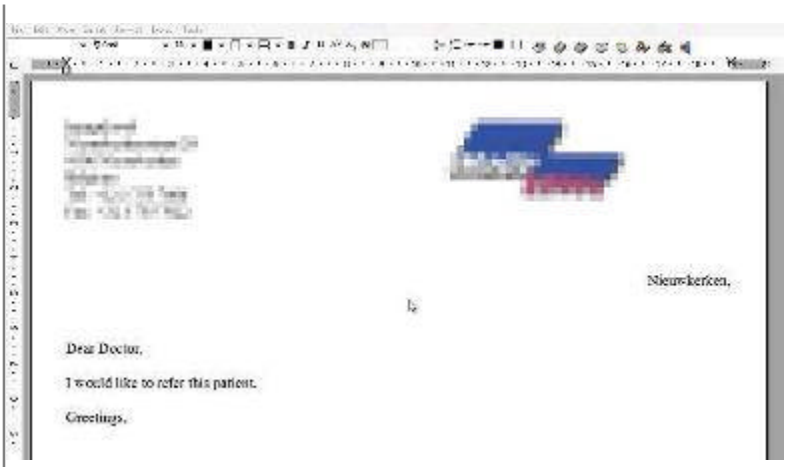
In this **more advanced topic** we will explain how to create and modify a template in the Report Module.

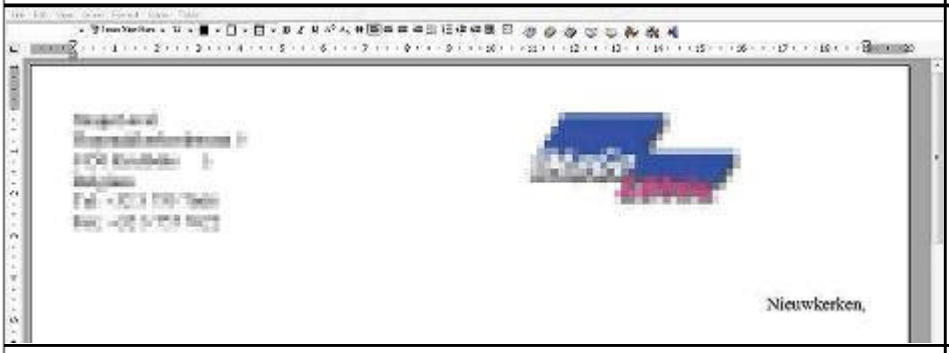
A template contains the fixed text that can be re-used in your communications. The templates can contain your logo, address information, paragraphs of text ...

Sometimes you would like to modify an existing template, for example when you have moved or a telephone number changes etc ...

1. To modify an existing template follow these steps

Action	Explanation
Open the Reporter module	.
Open the template you want to modify	You can select one of the documents in the reporter. These documents are based on templates that you can modify.

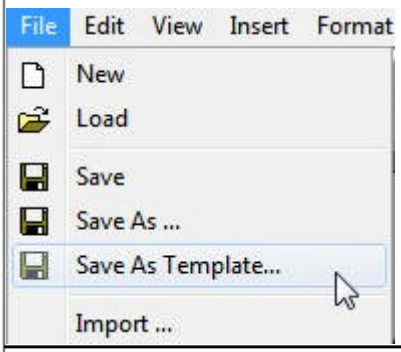




Make the necessary modifications.

In this example we will change the address.

Choose ***File>Save As Template*** in the Mediadent menu



.

Type in the name of the new template

Click the ***Save*** button

.

The template will appear in the Task pane on the right hand side.

.

3.7 New: Working with the Video Still Capture module

3.7.1 Working with the Video Still Capture module

Verify is the camera you want to use is **WDM or VFW compatible**. Some camera's can also be TWAIN devices.

These are all standards and it's important to understand what standards are supported before configuring the camera in Mediadent. This information can be found in the manual of the camera. Normaly with the camera, a CD is delivered with the necessary software to get the camera working under Windows. Make sure the camera already works on Windows before attempting to configure it under Mediadent.

WDM is a standard and most camera's are compatible with the WDM standard. Some older camera's are VfW compatible.

If your camera is a TWAIN device it can be configured as such in Mediadent.

In this article we will explain the usage of your camera in Mediadent. Configuring the camera in Mediadent is explained in our technical manual and should be done by a specialist (your dealer).

As mentioned above, you can use your camera via the **VFW StillCap** or the **WDM StillCap** module.

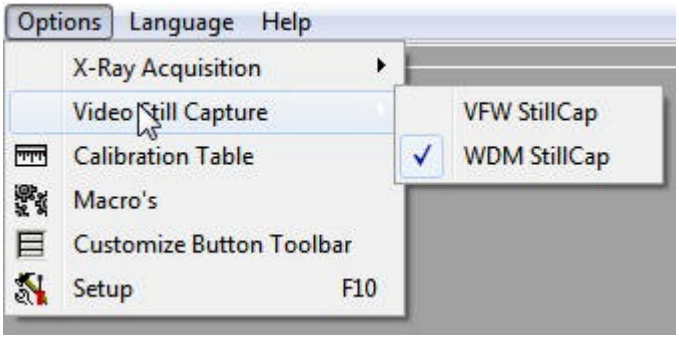
In this module you will be able to take pictures with your camera and store it in the patient's library for later reference.

The picture are taken by a wireless intra-oral camera, the **Discovery wireless camera**.

To **open** the WDM StillCap module

1. **Activate** the WDM StillCap via the Mediadent menu

Options>Video Still Capture\WDM StillCap



2. **Open** the module

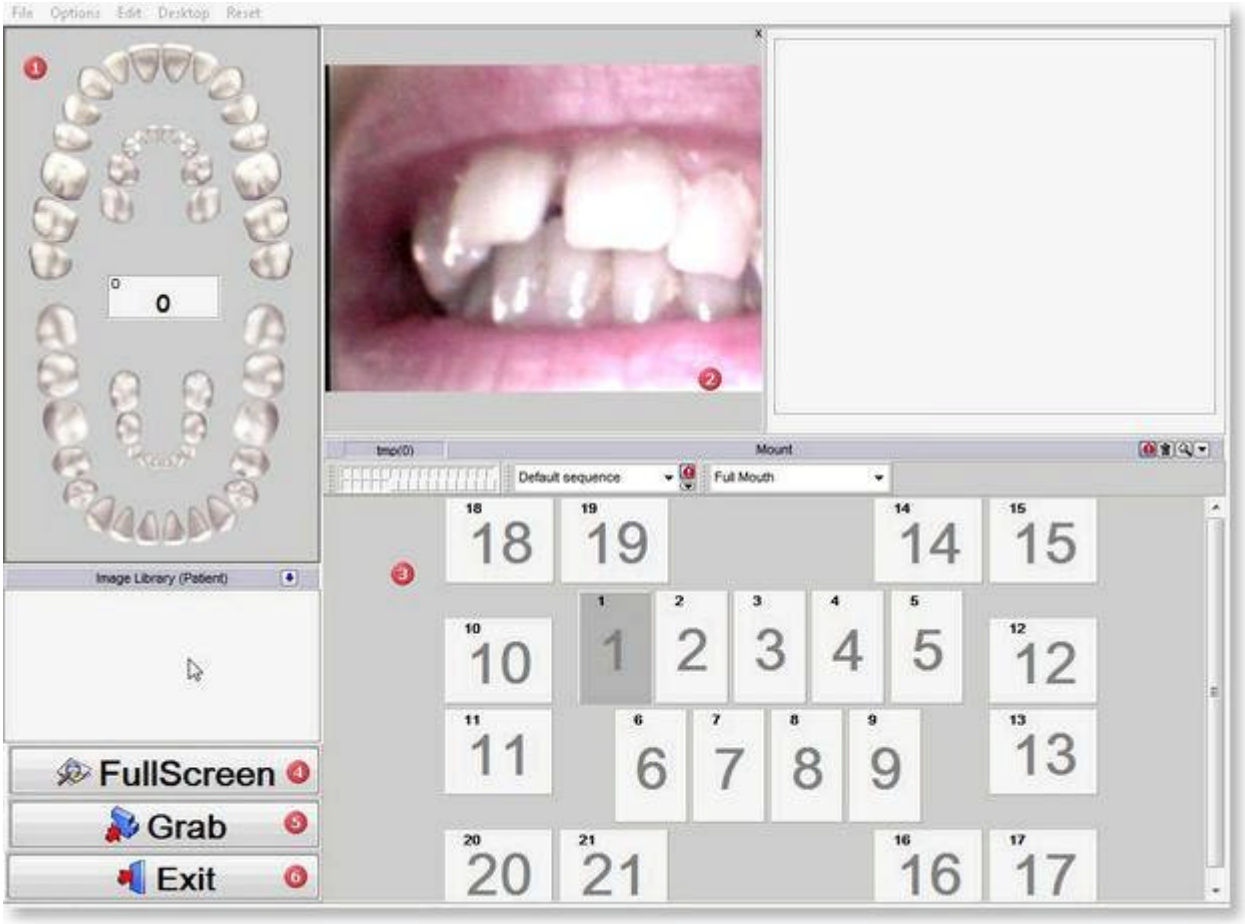
Click on the **icon**

3. The **WDM StillCap screen** opens.

In the following topics you will get an **overview** of the acquisition screen and learn how to **use the camera** in acquisition mode. If you are not happy with your desktop (position of the different screen elements) in acquisition mode, you can always change it. We will also give an **overview of additional options**.

1. The WDM StillCap screen overview

Overview of the screen elements:

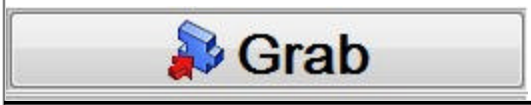
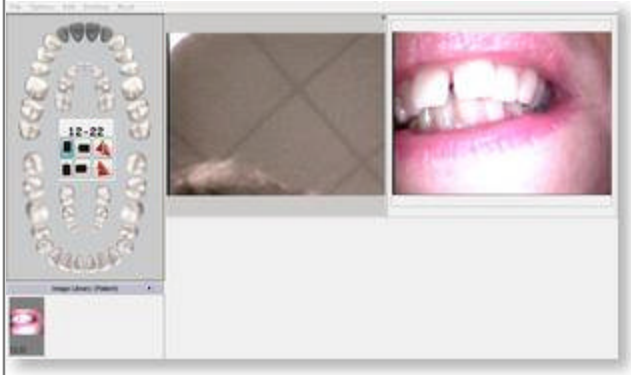


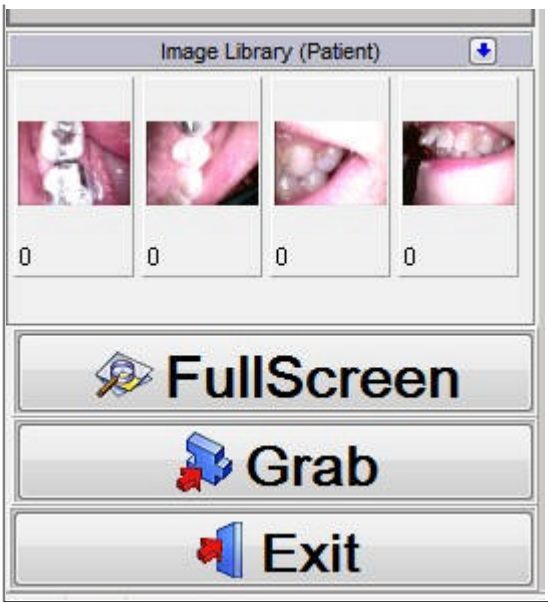
number	function
1	Tooth Scheme
2	Screen showing the images from the camera
3	Status mount

4	Full Screen : will switch to Full screen mode - this will allow you to see more details
5	Grab button: if you are happy with the picture, you can grab it.
6	Exit: will exit the screen and give you the possibility to save the grabbed image.

2. Use of the camera in Mediadent

To use **the teeth scheme** with the camera in the module follow these steps:

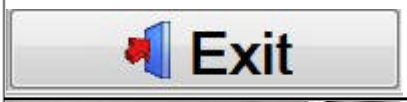
Action	Explanation
1. Position the camera in the mouth of the patient	.
2. In the **teeth scheme,** select the teeth to make the association	If you want to use the teethscheme, you need to **deactivate** the status. Read further the topic **3. Change the desktop** on how to do this. To learn how to work with the teeth scheme, read the article **Working with the teeth scheme (Section 3.3.1)**
3. Click on the ***Grab*** button 	.
	The picture is grabbed and ready to be used in the patient library.



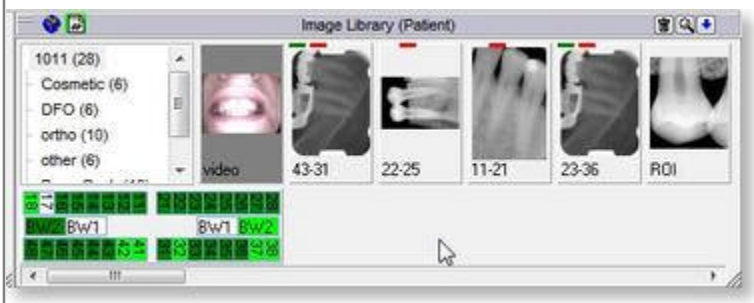
If you want to take more pictures, you can press the ***Grab*** button.

Everytime you use the Grab button, you will get a picture. If you are ready, click on the ***Exit*** button

4. Press the Exit button to save the images to the image library



.



By saving the image it will appear in the **patients library.**

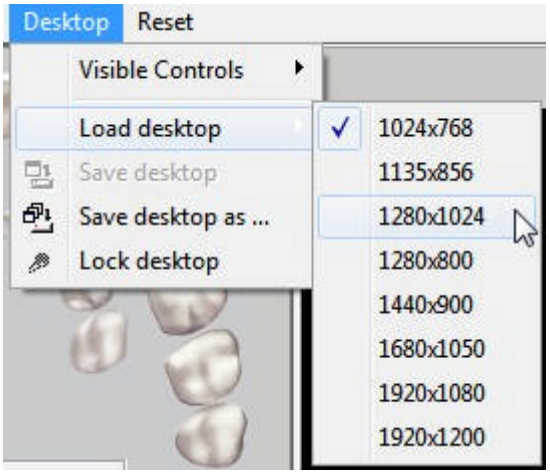
3. Change the desktop

3.7.1.1 1. Change the overall desktop

If you are not happy with the layout of the desktop in the acquisition screen, you can change

the different screen elements in the Mediadent screen.

Choose ***Desktop > Load desktop*** in the menu



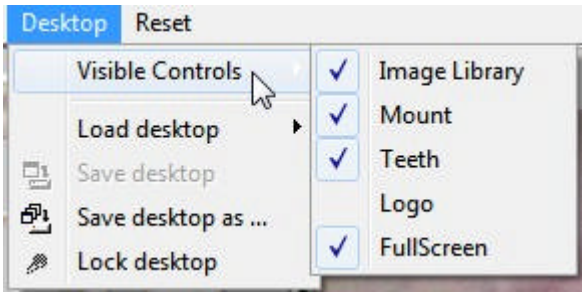
Don't forget that if you want to move the screenelements, always first Unlock the desktop before you can move the screen elements.

Read the article: **Working with desktops (Section 3.1.4)** for more detailed information.

3.7.1.2 2. Activate/de-activate screen elements

You can activate and de-activate screen elements (Visible controls)

If you find your screen to busy and you would like to de-activate certain screen elements, choose ***Desktop > Visible controls***



You have the possibility to hide the following elements:

- Image library

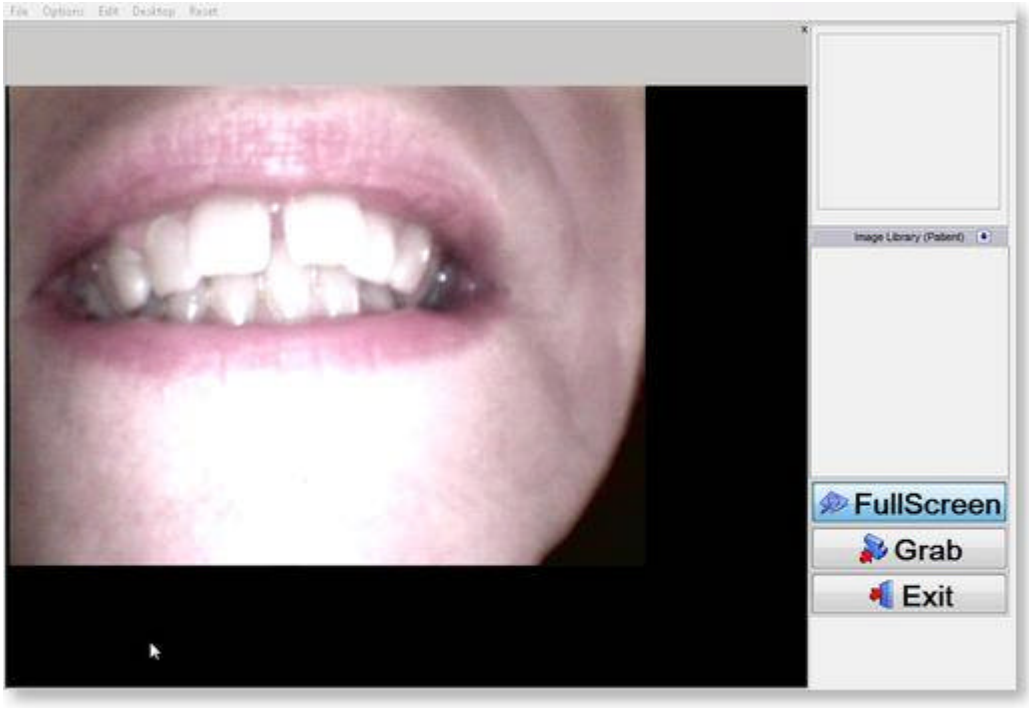
- Mount = the Status mount (Read more about the Status mount here: **Working with the status mount in acquisition mode (Section 3.4.2)**)

- Teeth = the Teeth scheme (Read more about the Teeth scheme here: **Working with the teeth scheme (Section 3.3.1)**)

- FullScreen = this view will allow you to see more of the image you want to take

When the Status Mount is **activated**, the pictures will be displayed in the Status Mount boxes. If there are tooth associations linked to the boxes, you will see this in the teeth scheme.

If you choose for **FullScreen** you will get the following screen:

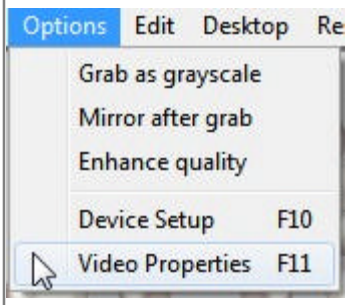


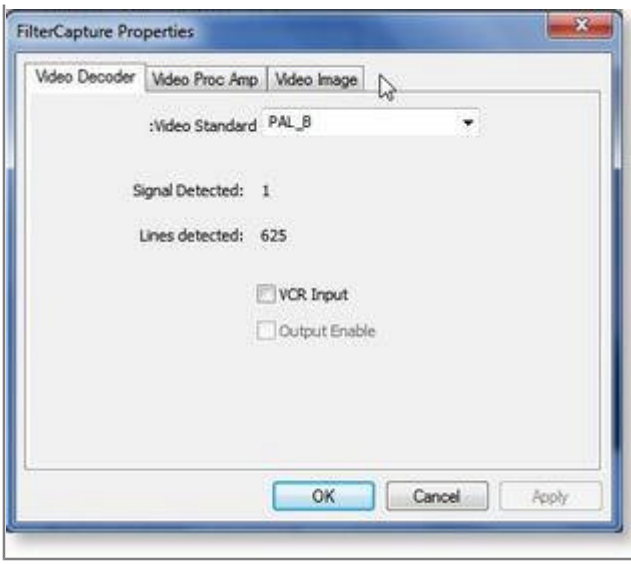
4. Additional options

In the WDM StillCap module you will be able to configure the way Mediadent handles the picture.

You may notice that when you take a picture, the picture is mirrored. You will be able to change that so you get your picture in the original orientation.

You can activate the following **options**:

<table>
<tr>
<td> 
</td>
<td>Options > Grab as grayscale
Pictures will be taken in grayscale
Options > Mirror after grab
Some camera’s mirror the image. You can put the image back in the original orientation.
Options>Enhance quality
To get a better quality, you can use this option.</td>
</tr>
<tr>
<td>The Device Setup (F10) is only to be used when configuring the camera in Mediadent. This is explained in our Technical manual. Once it has been configured, there is no need to change the settings in this option.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</table>



The **Video properties (F11)** will allow you to apply filters to the image.

On the Video Image tab you can for example change the contrast/brightness …

The other settings are best kept as they are.

4 How to's

4.1 Overview How to's

Mediadent Screen

How to select more viewports (Section 4.2.1)

How to customize the iconset (Section 4.2.2)

How do I select the ideal desktop (Section 4.2.3)

How do I delete a desktop (Section 4.2.4)

How to change practitioners info (Section 4.2.5)

Automatisation

How to create a macro (Section 4.7.1)

Mediadent Image Library

How to move images from one patient to another (Section 4.3.1)

How to find the patients recently accessed (Section 4.3.2)

Mediadent Mount

How to create a status mount (Section 4.5.1)

Mediadent Image manipulation

How to activate the negatoscope (Section 4.4.1)

How to calibrate an image (Section 4.4.2)

How to recover a deleted image (Section 4.4.3)

Mediadent export

How to send an image by e-mail (Section 4.6.1)

How to export multiple pictures of a patient (Section 4.6.3)

How to import images? ('HT12 How to import images' in the on-line documentation)

How to drag and drop an image in an e-mail (Section 4.6.2)

New : **New: How to burn a CD with images from Mediadent (Section 4.6.4)**

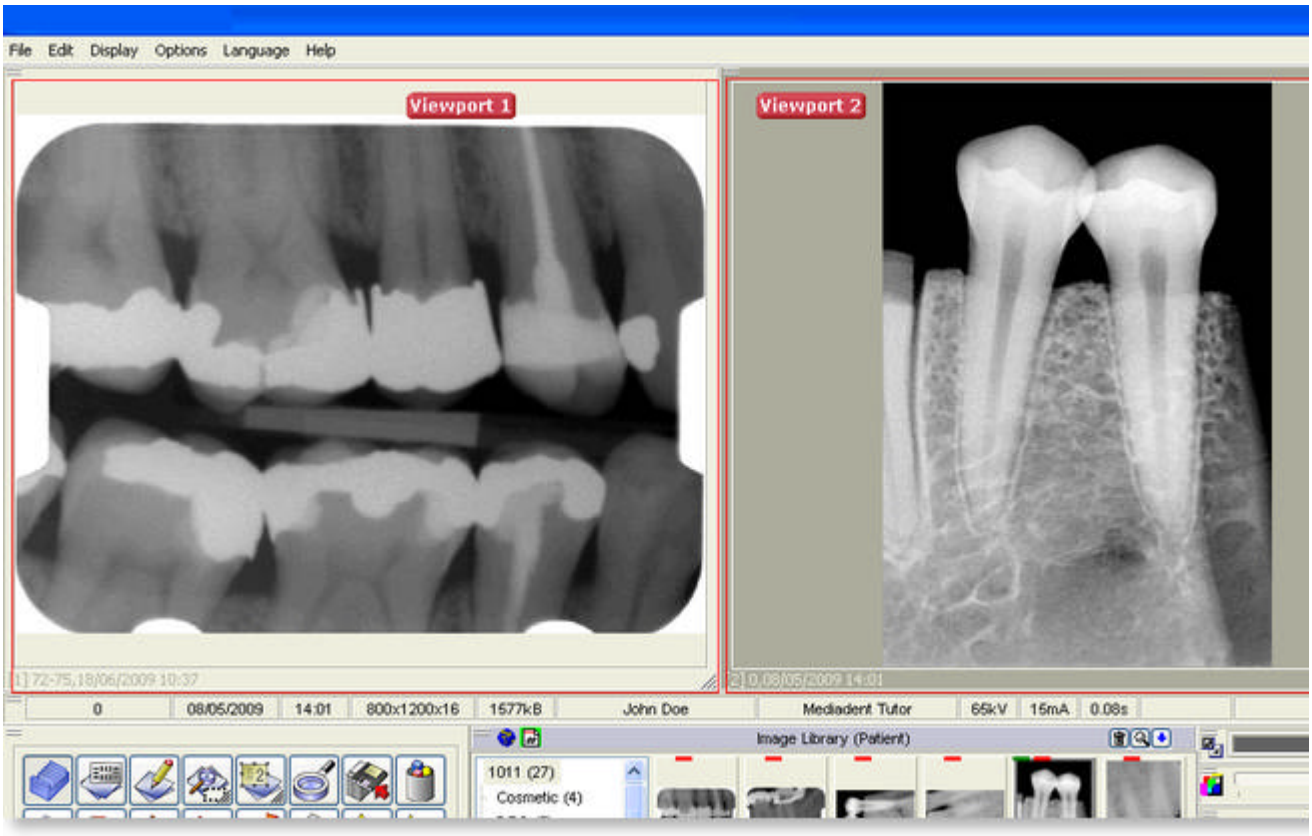
4.2 The Mediadent screen

4.2.1 How to select more viewports

Sometimes it's necessary to analyse different images from one patient. Maybe you want to compare images?

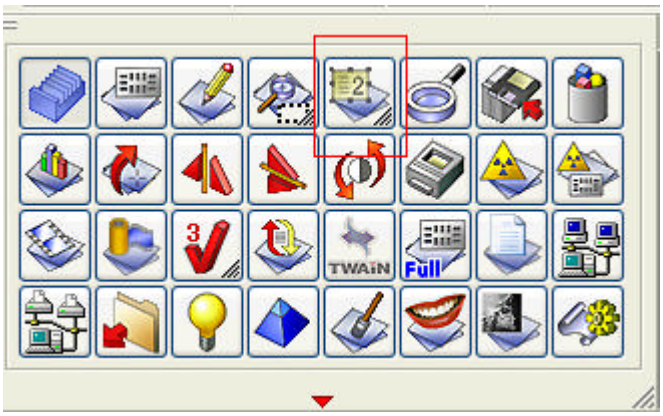
In Mediadent you will use the **Viewports** to load the images into. You can have up to **5** Viewports or analyse 5 different images.

In this example you see that **2 Viewports** are visible with 2 images**.**



To add Viewports to your Desktop:

Use to the **Viewport icon** in the **Iconset** :



In this example you can see that **2 Viewports** (you see the **number 2** on the icon) are active.

To modify the number of **Viewports** :

PRESS and **HOLD** the **left mouse button** on the icon until the icon **expands**.

Select the number of **Viewports** you would like to see by clicking the corresponding icon (1,2,3,4 or 5).

You can choose up to 5 **Viewports**.

4.2.2 How to customize the iconset

The Iconset is by default displayed on the **bottom** of the screen in the **left hand** corner.

It will give you **fast access** to certain Mediadent functionality. It is also possible to use the Mediadent menu, but often you will need more mouse clicks to get the same result.

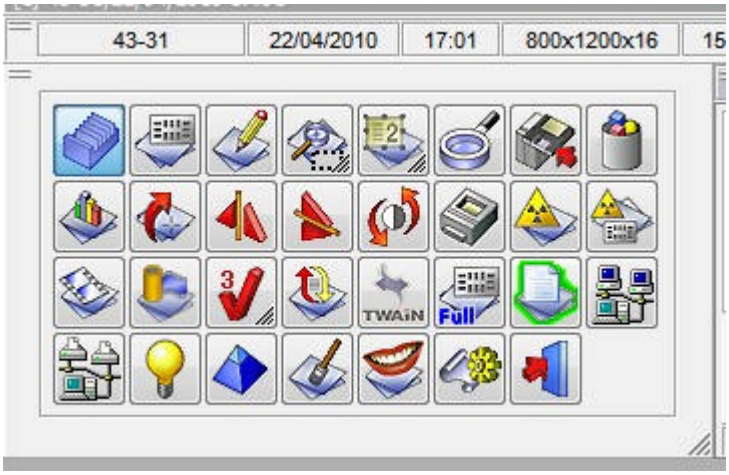
The Iconset is **interactive**, it will only show the icons that are relevant.

You will notice that when **no image is loaded** in the Viewport, a number of icons are **grayed out**.

After **loading an image** you will see the Iconset change.

This is the Iconset after loading an image, you see that **all the icons** are now **highlighted**.

The Iconset is interactive and will only activate the icons that are useful.



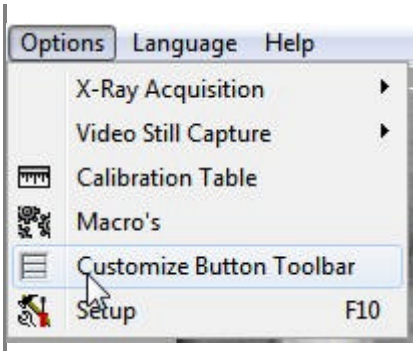
In this article we will discuss the following topics:

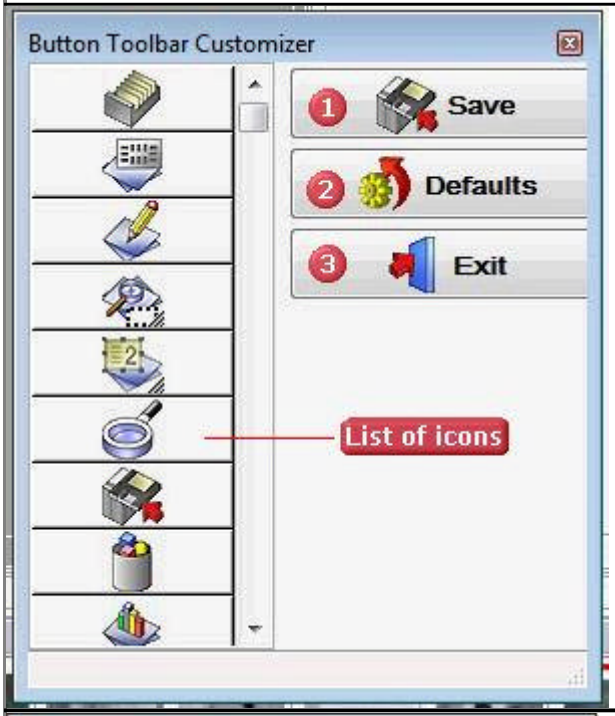
1. Deactivating an icon

The Iconset can be **customized**: you can **add or remove icons.**
If you find you have **too many icons** in your iconset that you don't use, you can **remove** them.

If, for **example,** you don't have **a Dicom network**, you can decide to **remove** the icon that launches the Dicom network:

Action	Explanation
Options>Customize Button Toolbar	We will activate the **Button Toolbar Customize** via de Mediadent menu.





The **Button Toolbar Customize** will appear on the screen.

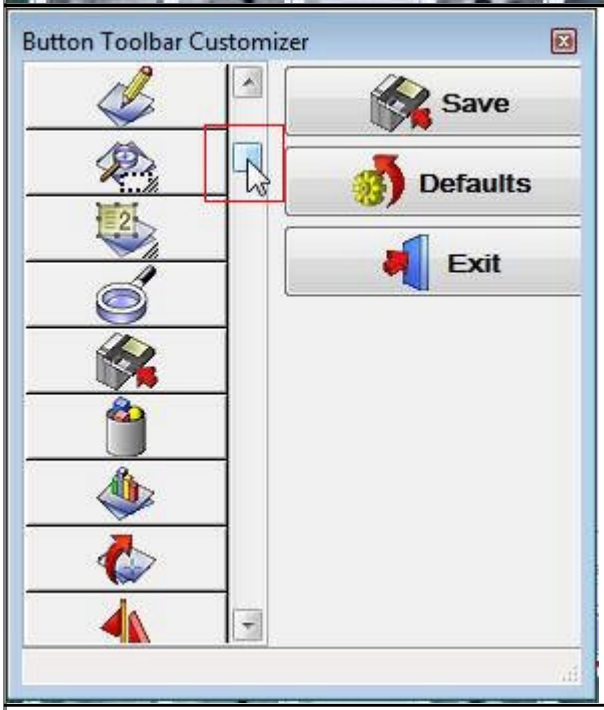
You will see on the **left side**, a **list of the icons** that are active in the Iconset.

If you see a **diagonal red bar** in the icon, this means that the icon is **not activated** in the Iconset.

1 The **Save** button will allow you to save the modifications you have made to the Iconset

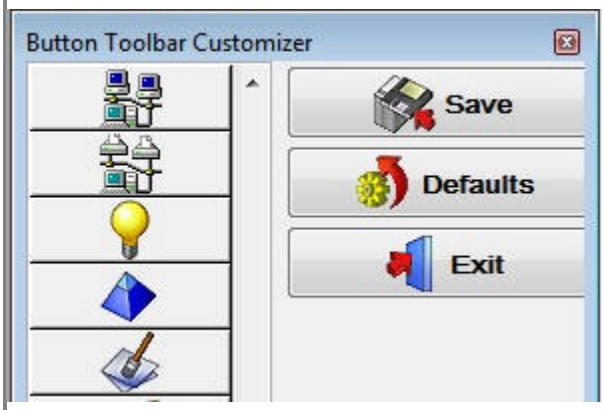
2 The **Defaults** button will reset the Iconset to the original settings

3 The **Exit** button, of course will Exit the screen.



You can use the **scroll bar** to see all the icons that can be placed on the Iconset.

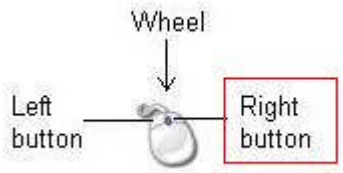
For the **example**, go through the list with the scroll bar and look for the Dicom network icon:

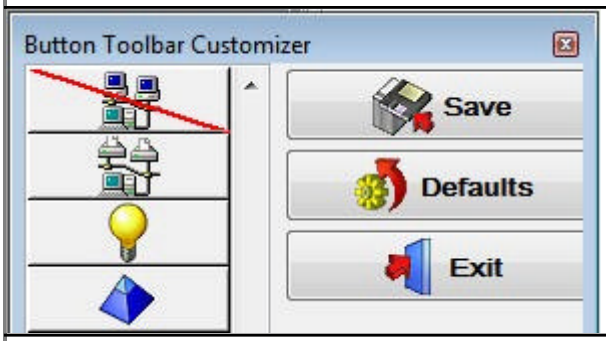


In our **example**, we would like to **deactivate** the icon for the Dicom network.

Make sure you can see the icon in the list

To **deactivate** an icon from the Iconset, click with the **RIGHT** mouse button on the icon.

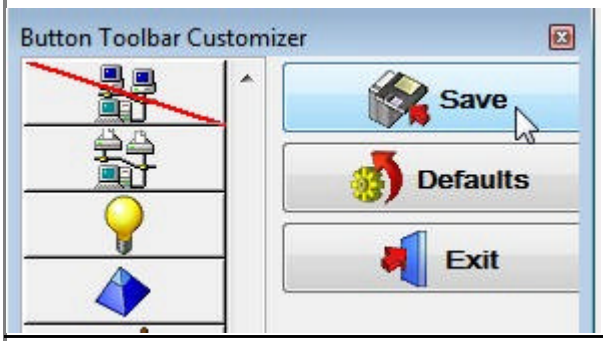




You will see the **red diagonal bar** appearing over the icon.

Press the ***Save*** button.

Press the ***Exit*** button.

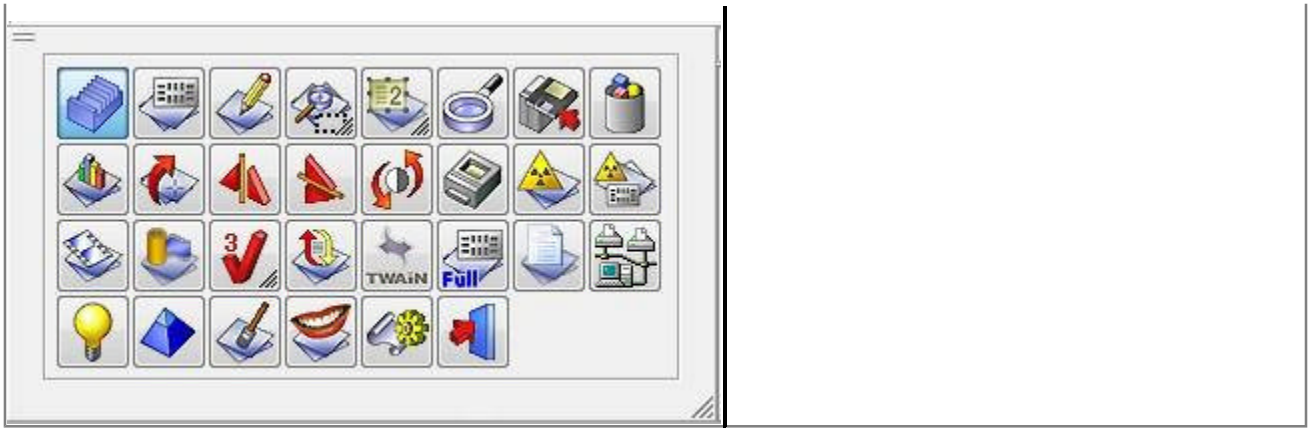


You need to **Save** your changes before your **Exit** the Button Toolbar Customizer.

Result, you will **no longer see the**

Dicom network icon in the Iconset.

You will only see the Dicom printer icon.

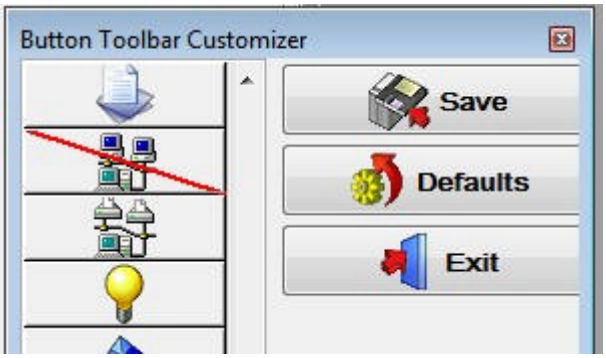


2. Reactivating an icon

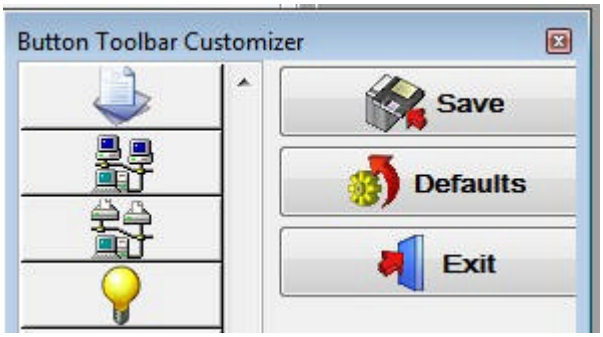
To reactivate an icon, you will have to go through the same process.

1. In the Mediadent menu, ***Options>Customize Button Toolbar***.

2. **Find** the icon want to activate again. This icon will have a diagonal red bar in it.



3. **Press** with the **right mouse button** on the icon. The red diagonal red bar will **disappear**.



4. Don't forget to ***Save*** *and* ***Exit.***

Another usage of the icons is when you have created a macro and you want to activate the macro from an icon in the Iconset. Read the article **'How to create a macro' (Section 4.7.1)**.

4.2.3 How do I select the ideal desktop

You have the possibility to select the ideal desktop. The ideal desktop is a desktop that shows all the neccessary **Mediadent screen elements** you need for your diagnosis.

Once the desktop is correctly selected there is no need to change it.

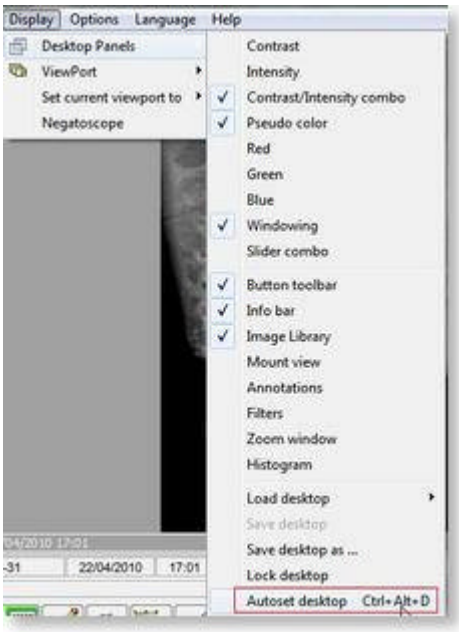
But if you **change** the monitor or PC screen (for example a wider screen) you will need to adapt you desktop.

If you notice that not all the Mediadent elements are displayed on the screen you will need to choose another desktop.

To choose the ideal desktop:

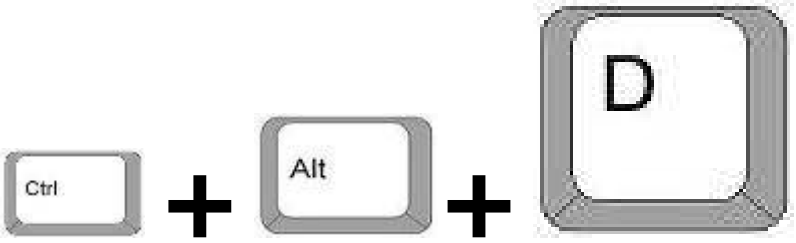
In the **Mediadent menu**, choose

Display>Desktop Panels>Autoset desktop



Or

Choose the **keycombination** : ***Ctrl+Alt+D***



To correctly use this key combination, you first **press and hold** the **CTRL** key, then **press and hold** the **ALT** key and then **press** the letter **D** on your keyboard.

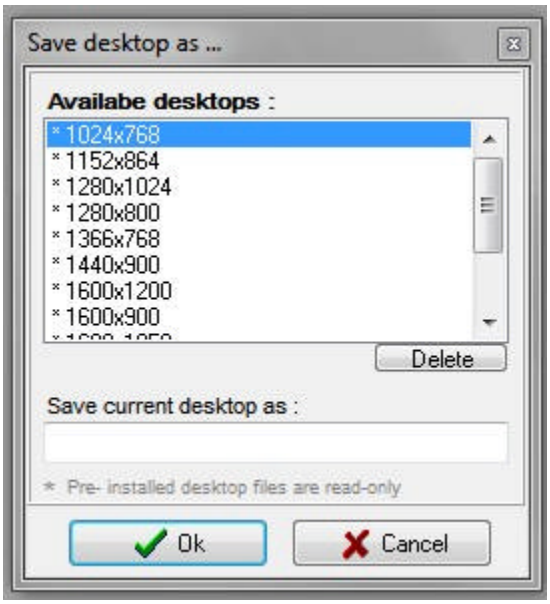
4.2.4 How do I delete a desktop

Changing your monitor is often a reason to delete a previous created desktop with another

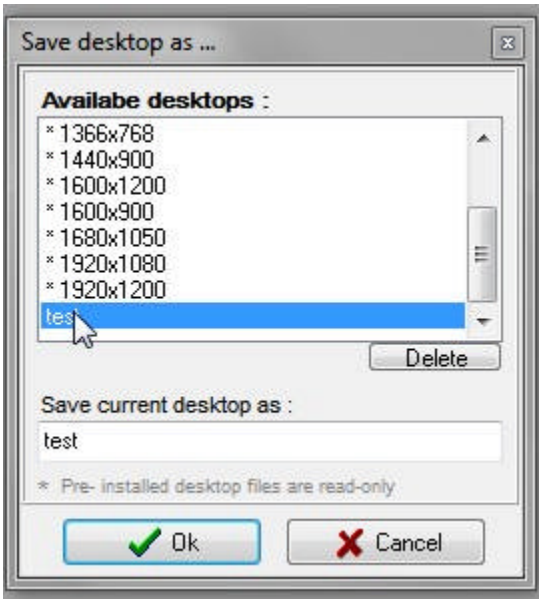
screen configuration.

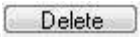
Follow these **steps** to delete a desktop

1. ***Display>Desktop Panels>Save desktop as ...***



2. **Select** the desktop in the list you want to delete. In this example we choose for the desktop **test**.



3. Click the ***Delete*** button. 

4.2.5 How to change practitioners info

If you have a practice with **several dentists** it can be practical to have the **name** of the practitioner in the **Status bar** of Mediadent.

Read the article: **General Settings (Section 7.2)**, if you want to learn how to configure the practitioner's name.

4.2.6 How to configure the desktop

The **Desktop** is the way in which the different elements of the Mediadent are presented on your **screen**.

The advantage is that you can **change the layout of the different screen elements**, reflecting your way of work.

If you want to change the desktop, you will first need to know how to **activate/deactivate certain screen element**.

Once activated you **move** the screen elements or even **re-size** them to fit your needs.

To change the Desktop follow these **steps**:

1. **Activate/Deactivate** screen elements
2. **Unlock** the Desktop
3. **Move or resize** the elements
4. **Lock** the Desktop
5. **Save** the Desktop

First read the article **Overview of the Mediadent screen elements (on-line documentation)** to get a better understanding of the different screen elements.

1. Activate/deactivate Mediadent screen elements

When activating a screen element, the element will be **visible**.

To activate an element

Display > Desktop Panels > select the deactivated element

Remark : make sure the sign is in front of the option

or ***click*** on the corresponding ***icon*** in the Iconset to **activate** the element.

To deactivate an element choose

Display > Desktop Panels > select the active element

Remark : make sure the sign is **NOT** in front of the option

or ***click*** on the corresponding ***icon*** in the Icon set to **deactivate** the element.

2. Change and Save the Desktop layout

Once you have chosen the screen elements you want to activate. You have the possibility to move them to another location on your screen.

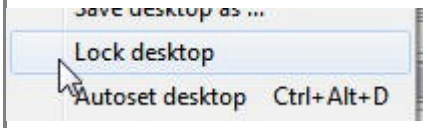
Follow these steps to **change** the Desktop and to **save** it.

Action	Explanation

1. Unlock the Desktop

1. Always **Unlock** the desktop first

Display > Desktop Panels > Lock desktop



Remark : please make sure the ☑ is not in front of the option.

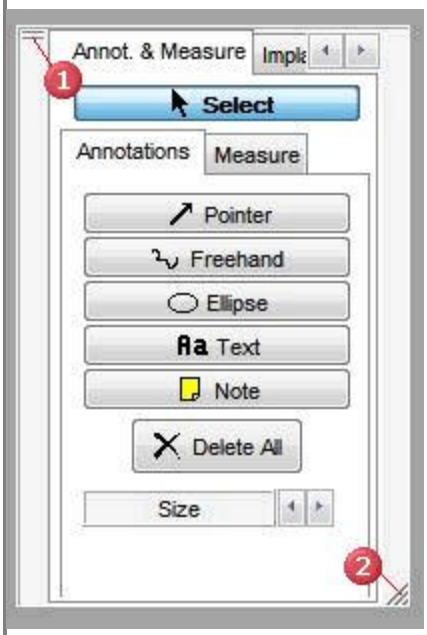
Always unlock the desktop before making changes.

You will notice the desktop is **Unlocked** when there are **handles** available in the **left top** corner and the **right bottom** corner of the screen element.

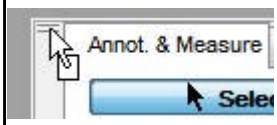
See **point 2.** for more explanation on how to use these handles.

2. Move and/or resize the Mediadent screen elements

2. The screen elements are free and can be **moved** to another location on the screen or resized to show all the options.



1 **Move** the screen elements to another location by dragging and dropping the elements via the handles, situated in the **left top hand corner** of the element.



2 **Resize** the screen elements by using the handle in the **right bottom corner**.

3. Lock the Desktop

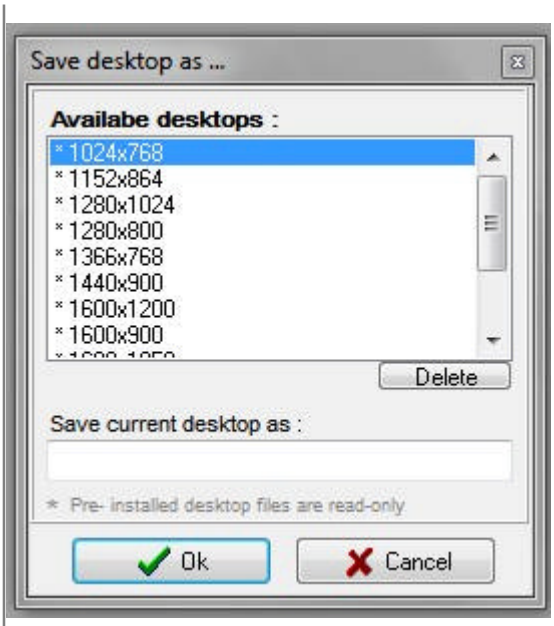
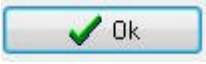
3. If you are pleased with the result, you must **lock** the desktop.

Display > Desktop Panels > Lock Desktop

Remark : the ☑ sign needs to be in front of the option in the menu.

4. Save the Desktop

Display>Desktop Panels>Save desktop as ...

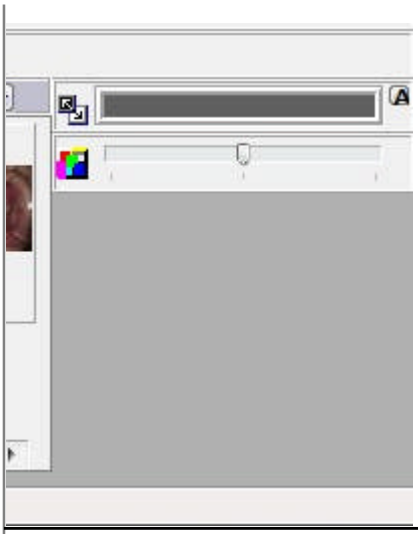
 5. Type in a recognizable desktop name in the **'Save current desktop as :** ' box. 6. Click  to confirm.	You will see a list of **pre-installed desktops** (indicated with *). They cannot be changed. After saving your desktop, you will be able to select it via ***Display > Desktop Panels>Load Desktop***

In the following **examples** we will show how to deactivate the **Constrast/Intensity combo** and how to **add a Viewport.**

Click on this title to view the examples

- **Click on this title to view the examples**

Action	**Explanation**
As described above, **unlock** the desktop	.
We will deactivate the **Contrast/Intensity combo.** In the Mediadent menu choose ***Display > Desktop Panels >*** deselect one of the elements For example : ***Contrast/Intensity combo*** The screen element is gone.	Remark : please make sure the is **not** in front of the Contrast/Intensity combo option.

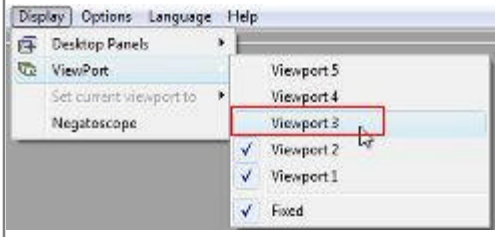


Adding an additional **Viewport**

In the Mediadent menu choose

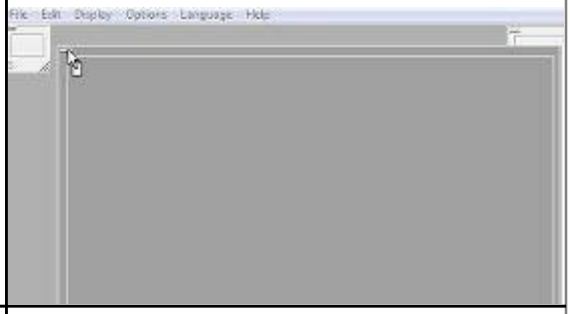
Display > ViewPort and select the Viewport you want to activate.

In this **example** we would like to see **3** Viewports.

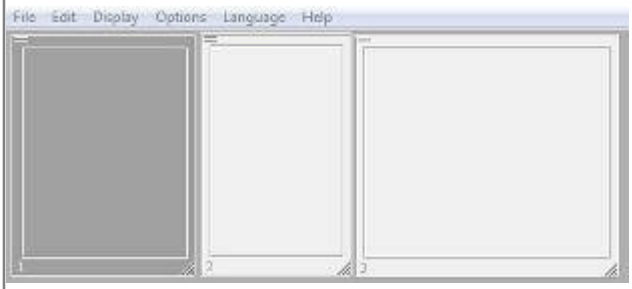


Be aware that the Viewports that are activated will appear **under** the existing Viewports. If you desktop is Unlocked you will be able to move the Viewports to another location and you will see the **newly activated** Viewports appearing.

In this **example** the Viewport 3 was under the Viewport 1. By moving the Viewport 1 you will see the Viewport 3.



Position the **3 Viewports** correctly.



.

As described earlier, **lock** the desktop and **save** it.

.

4.2.7 How to load another desktop

The desktop that is loaded is the **Mediadent screen layout** that has been configured for your monitor size and resolution.

It will show all the different Mediadent screen elements.

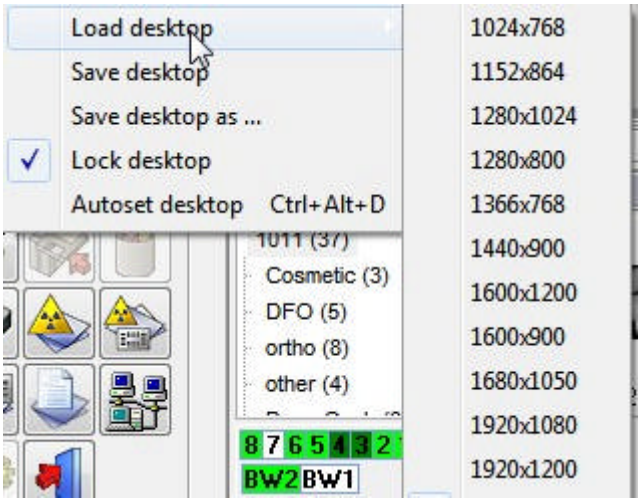
To get a better understanding of the desktop, read the article **A desktop (Section 9.2)**.

If you are not happy with the current Mediadent screen configuration, you can load **another desktop**.

Be aware that if you load a desktop that does not fit your monitor, some Mediadent screen elements will disappear from your screen.

For example choosing a desktop that is suited for a wider monitor will have as a consequence that the Mediadent screen elements (like Windowing, Histogram, ...) on the right hand side are not shown on a monitor that is smaller.

1. Choose in the Mediadent menu ***Display > Desktop Panels > Load desktop***
2. ***Click*** on the Desktop you want to load



You will see a list of **pre-installed desktops**. The names indicated most current screen resolutions. Depending on the type of screen you have, you will be able to choose one of the desktops.

A Desktop '1024x768' means that the Mediadent Desktop will be shown on your monitor in '1024 pixels (width) x 768 pixels (hight) resolution'.

To load the **ideal desktop** suited for your monitor. You can choose the option ***Display>Desktop Panels>Autoset desktop*** in the Mediadent menu.

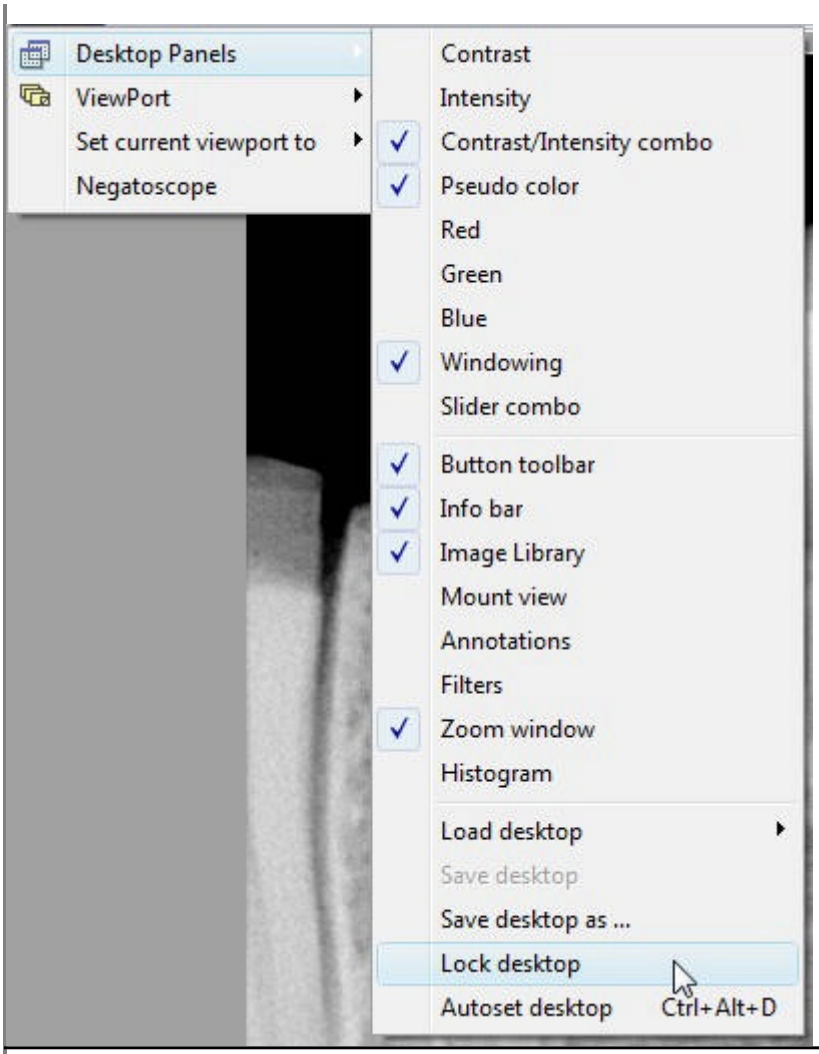
4.2.8 How to move the zoom window

The **'Zoom window'** is one of the Mediadent screen elements you can move.

In this article we will explain how to move the 'Zoom window' screen element. The steps in this article apply to all the Mediadent screen elements.

To move the **Zoom window** follow these steps:

Action	Explanation
1. ***Unlock*** the desktop by ***de-selecting*** the option ***Lock Desktop.***	

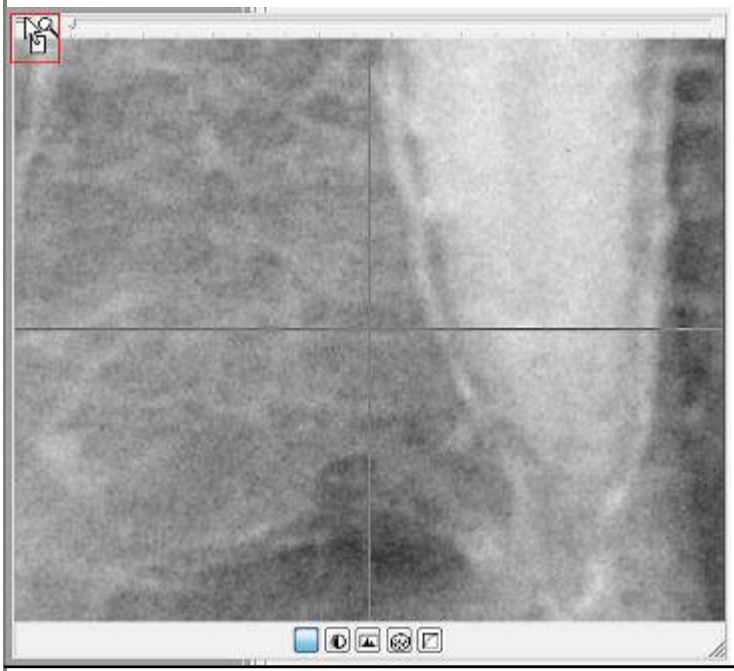


If you want to move the Zoom Window, you will first need to Unlock the desktop.

The setting should **NOT** be active

(**no** check mark ✓ in front of the option).

2. ***Move*** the Zoom Window by using the handles.



To move the ZOOM Window to the desired area on your screen you have to use the handles on the **top left corner of the Window**.

You will see **2 horizontal lines** in the top left corner of the window, this is an indication that the ZOOM Window can be moved.

3. Lock the desktop again. ***Display > Desktop Panels*** and Select ***Lock desktop***	Once positioned correctly, you can choose to Lock the Desktop again. A check mark must be in front of the option Lock Desktop. The next time you use the Zoom Window, it will be repositioned.
4. Save the desktop ***Display > Desktop Panels*** and select ***Save desktop***	The next time you launch Mediadent the Window will be correctly positioned.

4.3 The Mediadent image library

4.3.1 How to move images from one patient to another

This article will explain how to **move an image from one patient's library to another**.

If you have stored an image in the **wrong** patient library, you have the possibility to move the image to the Image library of the **correct** patient.

To move an image from one patient's library to another, we will use the **Global Image Library** . This is a **common folder** that is accessible from every patient's library. It will act as a **temporary storage** for images you want to move. Read the article: **The global and patient library (Section 9.4)** and learn more about the differences.

If you want to check the list of recently accessed patients to retrieve your image, read the article: **How to find the patients recently accessed (Section 4.3.2)**.

Copying an image from one patient's library to another is done in **4 steps**:

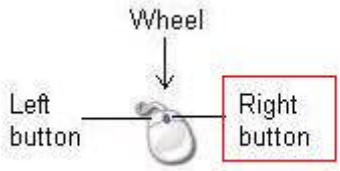
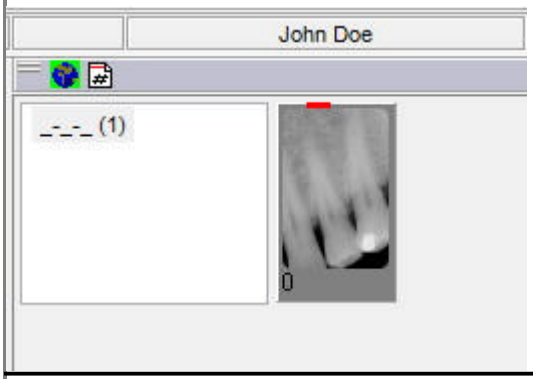
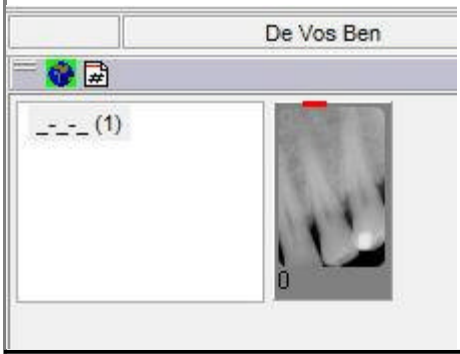
Step 1. Open the **wrong** patient's Image library. So this is the patient you want to copy the wrong image **from**.

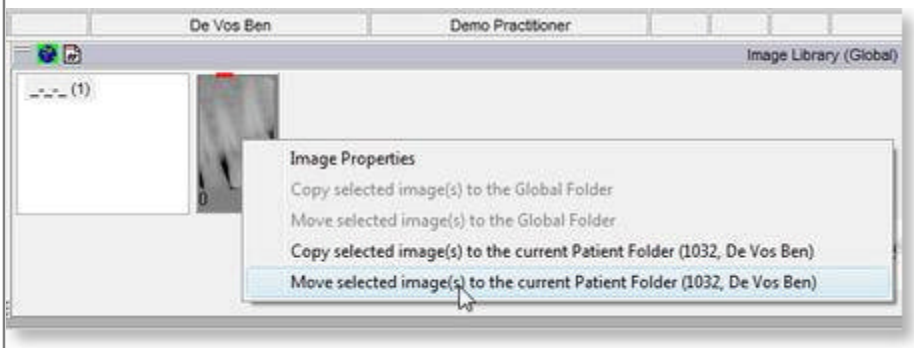
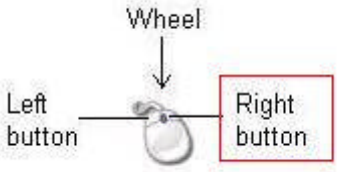
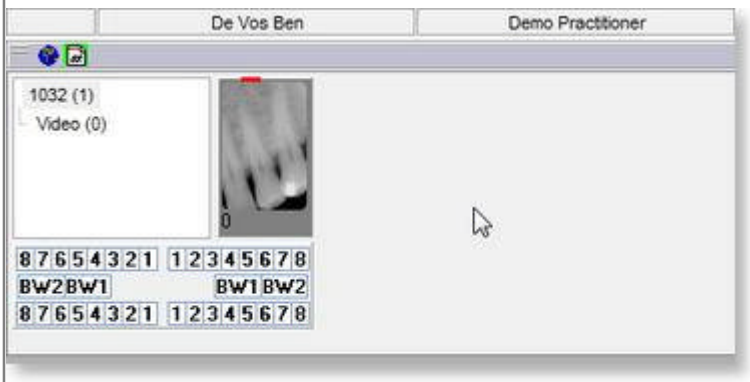
Step 2. Copy the image to the **Global Image Library**

Step 3. Open **correct** patient's library. So this is the patient you want to copy the image **to.**

Step 4. Copy the image from the **Global Image Library** into the **correct** patient's library.

Action	**Explanation**
1. Open the **wrong** patient's Image library 2. ***Select*** the image you want to move to another library and ***click*** with your **RIGHT** mouse button on the image. 	So this is the patient's librar containing the wrong image In this example we have an image from another patient John Doe's library. The menu will appear and you will be able to **Copy** or **Move** the selected image. I our example we will choose to **Move** the image.

	
3. Choose ***'Move selected image(s) to the Global Folder'***	.
4. ***Click*** on the **Global Image Library** icon to verify. 	The image is moved to the **Global Image Library.**
4. ***Open*** the Library of the patient you want to copy the image to. This is done through your Patient Management System. 	In this example we open the the Patient Image Library of **De Vos Ben** which is empty
5. ***Click*** on the **Global Image Library** icon to access the image. 	In the previous steps we copied the image from John Doe's library to the Global Library. We need to go to the **Globa Image Library** to get the image so it can be copied to the current **Patient's Library** (De Vos Ben)**.**
6. ***Click*** with your **RIGHT** mouse button on the image stored in the	

Global Image Library.  	Once in the Global Image Library, you will **move** the image from the Global Imag Library to the current Patient's Library. 
7. Select ***'Move selected image(s) to the current Patient Folder (...)'***	.
8. ***Select*** the Patient's Library by clicking on the **Patient's Library icon**	Go back to the De Vos Ben's Patient Library by clicking o the **Patient's Library icon**
9. **Result**  	The image is stored in the current **Patient's Library**.

4.3.2 How to find the patients recently accessed

Sometimes it can be practical to find **images** back that were recently acquired for a specific patient.

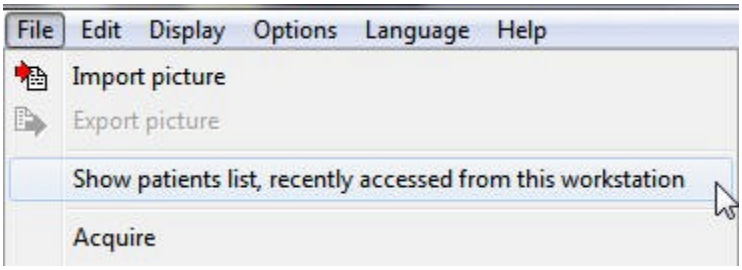
Maybe you have selected the wrong patient when acquiring the images? Or, you can't find certain images back?

Mediadent can help you because you will be able access the list of patients that were recently accessed.

This list contains the **100 recently patients accessed** from this workstation**.**

To access this list:

Go to ***File > Show patients list, recently accessed from this workstation***

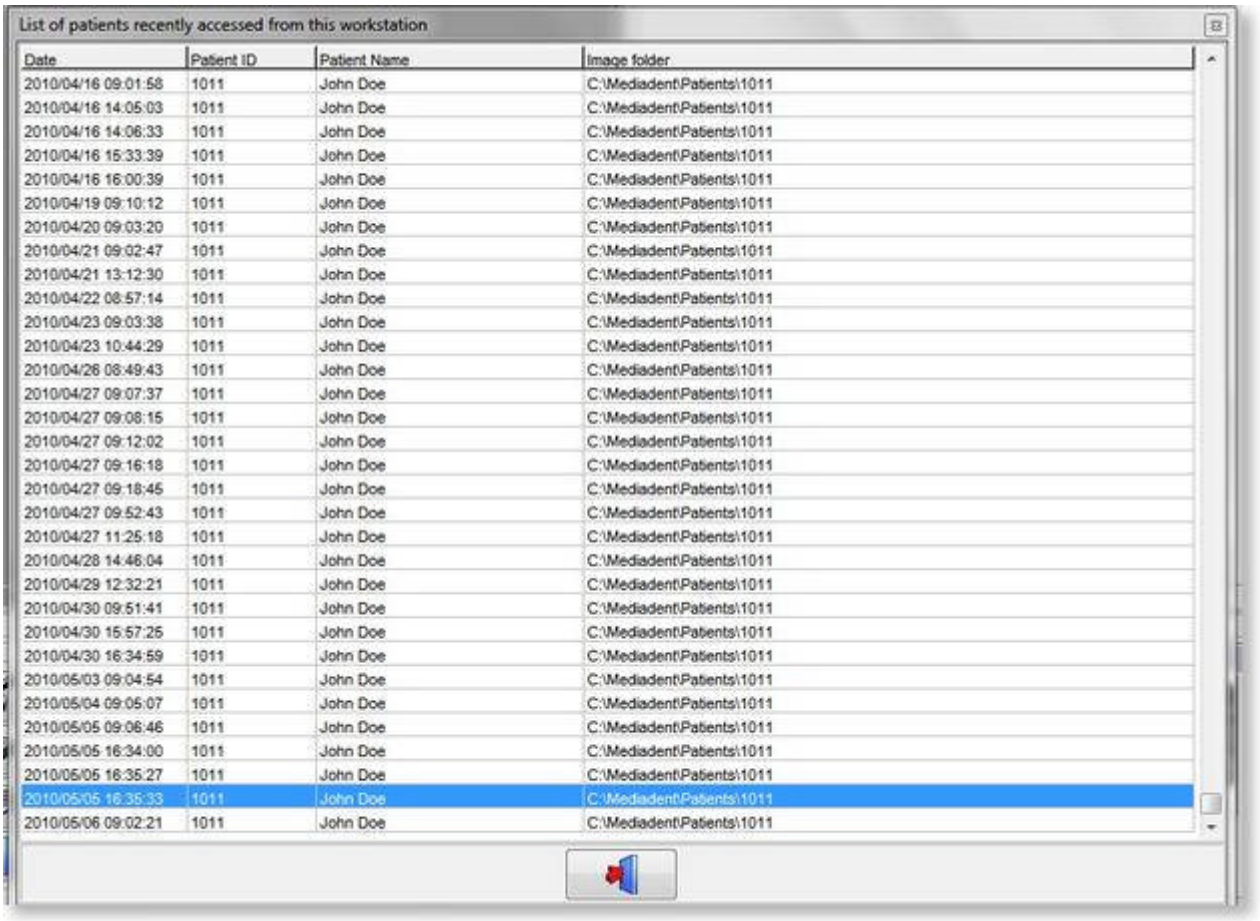


You will get a list similar to this one. The list contains the **date** the patient was accessed, the **patient ID**, **patient name** and **image folder**.

In this way you can retrace when certain images were taken and where they were stored.

You can double click on the **patient's name** and the library will open.

To view the images, close this screen by clicking on the **Exit** button.


List of patients recently accessed from this workstation
Date
Patient ID
Patient Name
Image folder
2010/04/16 09:01:58 1011 John Doe C:\Mediadent\Patients\1011
2010/04/16 14:05:03 1011 John Doe C:\Mediadent\Patients\1011
2010/04/16 14:06:33 1011 John Doe C:\Mediadent\Patients\1011
2010/04/16 15:33:39 1011 John Doe C:\Mediadent\Patients\1011
2010/04/16 16:00:39 1011 John Doe C:\Mediadent\Patients\1011
2010/04/19 09:10:12 1011 John Doe C:\Mediadent\Patients\1011
2010/04/20 09:03:20 1011 John Doe C:\Mediadent\Patients\1011
2010/04/21 09:02:47 1011 John Doe C:\Mediadent\Patients\1011
2010/04/21 13:12:30 1011 John Doe C:\Mediadent\Patients\1011
2010/04/22 08:57:14 1011 John Doe C:\Mediadent\Patients\1011
2010/04/23 09:03:38 1011 John Doe C:\Mediadent\Patients\1011
2010/04/23 10:44:29 1011 John Doe C:\Mediadent\Patients\1011
2010/04/26 08:49:43 1011 John Doe C:\Mediadent\Patients\1011
2010/04/27 09:07:37 1011 John Doe C:\Mediadent\Patients\1011
2010/04/27 09:08:15 1011 John Doe C:\Mediadent\Patients\1011
2010/04/27 09:12:02 1011 John Doe C:\Mediadent\Patients\1011
2010/04/27 09:16:18 1011 John Doe C:\Mediadent\Patients\1011
2010/04/27 09:18:45 1011 John Doe C:\Mediadent\Patients\1011
2010/04/27 09:52:43 1011 John Doe C:\Mediadent\Patients\1011
2010/04/27 11:25:18 1011 John Doe C:\Mediadent\Patients\1011
2010/04/28 14:46:04 1011 John Doe C:\Mediadent\Patients\1011
2010/04/29 12:32:21 1011 John Doe C:\Mediadent\Patients\1011
2010/04/30 09:51:41 1011 John Doe C:\Mediadent\Patients\1011
2010/04/30 15:57:25 1011 John Doe C:\Mediadent\Patients\1011
2010/04/30 16:34:59 1011 John Doe C:\Mediadent\Patients\1011
2010/05/03 09:04:54 1011 John Doe C:\Mediadent\Patients\1011
2010/05/04 09:05:07 1011 John Doe C:\Mediadent\Patients\1011
2010/05/05 09:06:46 1011 John Doe C:\Mediadent\Patients\1011
2010/05/05 16:34:00 1011 John Doe C:\Mediadent\Patients\1011
2010/05/05 16:35:27 1011 John Doe C:\Mediadent\Patients\1011
2010/05/05 16:35:33 1011 John Doe C:\Mediadent\Patients\1011
2010/05/06 09:02:21 1011 John Doe C:\Mediadent\Patients\1011

Read the article: **How to move images from one patient to another (Section 4.3.1)**.

4.3.3 How to search for images

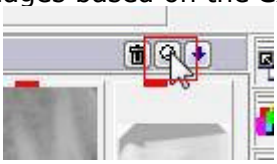
If you have a large number of images for a particular patient, it can be difficult to select the correct image for analysis.

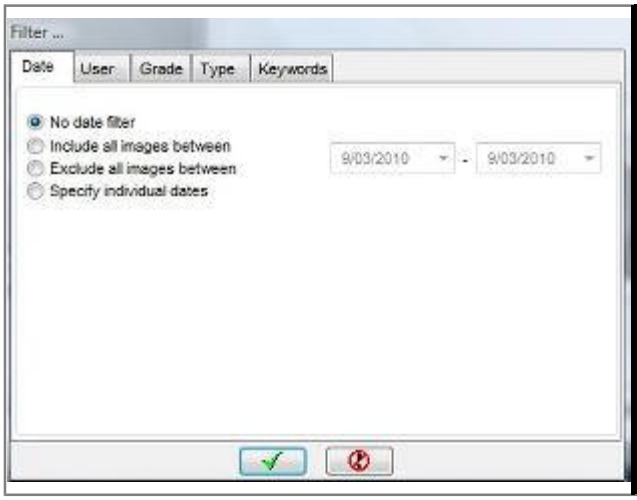
In the Image Library you have the possibility to search, or better **filter** out the correct images.

You can determine the filter or search criteria based on the **extra information or keywords** you have associated to the images.

It is clear that you can only search on keywords or additional information such as **User, Grade, Type and Keywords** if they have been associated to an image.

If nothing is associated, the filter will not work.

To filter out images based on the **extra information or keywords** you need to use the following **icon**  in the Image Library.



You can filter or search images based on:

1. Date
2. User
3. Grade
4. Type
5. Keywords

1. Search based on Date

You can filter out images that were taken in a **particular date range**.

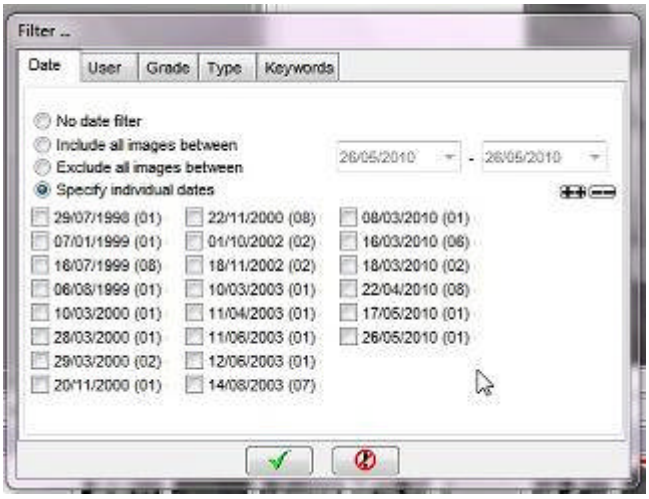
If you know when the patient had an appointment, you can easily filter out the images that were taken on that particular date.

You can:

- **Include all images between** certain dates, the result of this filter will only be the images that were taken between certain dates

- **Exclude all images between**, the same as above, but the result will be you will see the images that were taken outside of the date range

- **Specify individual dates**



Click to confirm.

When selecting this option, you will see the dates of the images that were taken for that particular patient. If you select one of the dates, you will get the images that were taken for that patient on that date.

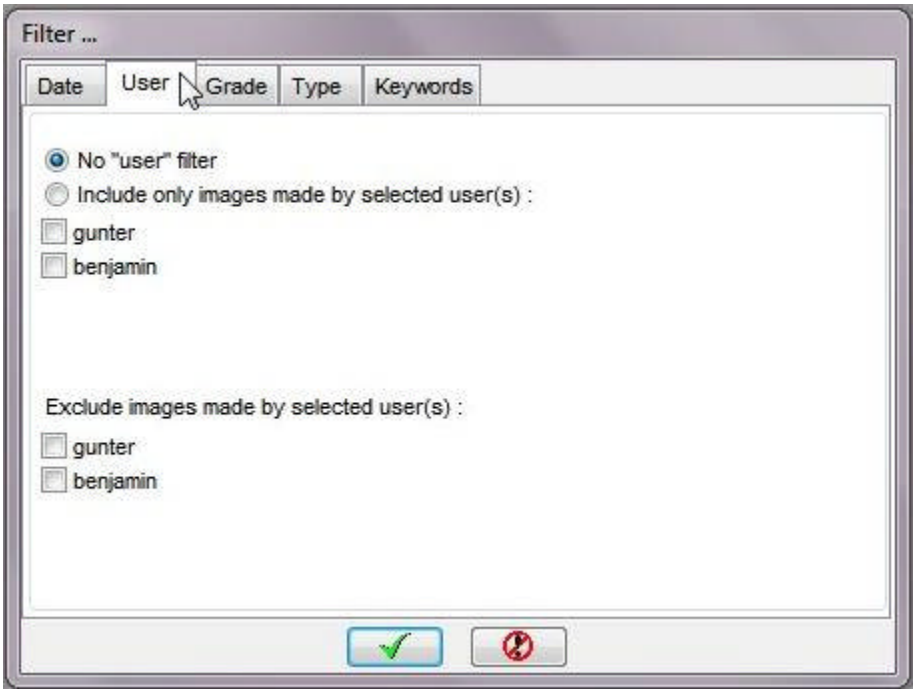
To see **all the images** back, you will need to reset the Image Library. See the topic ***6. Resetting the Image Library***.

2. Search based on User

You can **include** or **exclude** images that were taken by certain **users**.

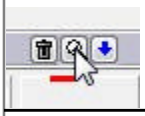
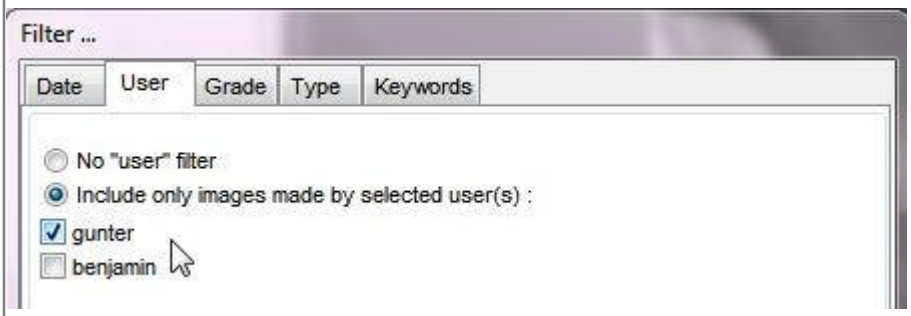
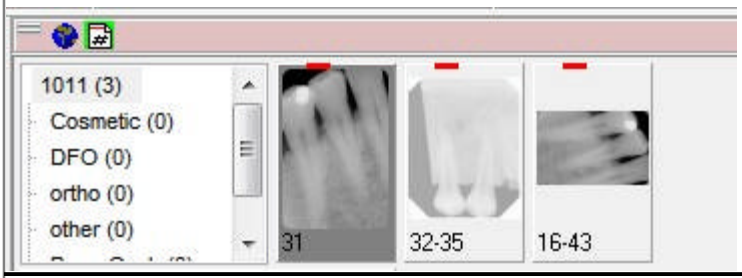
In this example I have setup Mediadent so I can choose **2 Users (gunter, benjamin)** when I save an image or in the image properties.

Read the article **Mediadent Setup: Display Settings (Section 7.4)** to learn more on how to configure Mediadent to be able to select **particular users** when saving an image.



Select one of the users and you will only see the images taken by that user.

Example: We will select **gunter**, so we will only see the images where the User gunter is associated with.

Action	Explanation
1. Click on the ***Search*** icon in the Image Library 	.
2. Select tab **User** and select **'gunter'**.  3. ***Click*** to confirm	We have added this keyword when we saved this image. See Also the topic **Specify Extra Info and Keywords (Section 3.5.2)** for more information. You can also add this via the **Image Properties (Section 3.5.1)** afterwards.
3. **Result**: You will only see the images where the user **gunter** is associated with. 	The **pink bar** is an indication that you have a **filter** active.
See ***6. Resetting the Image Library***	To see all the images back, you will need to reset the Image Library. See the topic ***6. Resetting the Image Library***.

To add the **User** association:

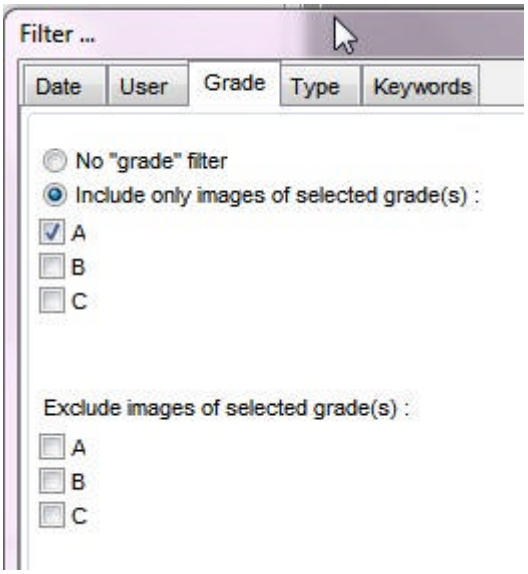
- See Also the topic **Specify Extra Info and Keywords (Section 3.5.2)** for more information.
- You can also add this via the **Image Properties (Section 3.5.1)** afterwards.

3. Search based on Grade

Search based on **Grade** works in the same manner as the Search based on User.

Click on the **'Grade'** tab and for example select to see the images with **Grade 'A'** associated to them.

You can also choose to Exclude those images.



Always **click** to confirm.

If you don't get any images back, it means no images have the association with Grade A.

To add the **Grade** A association:

- See Also the topic **Specify Extra Info and Keywords (Section 3.5.2)** for more information.

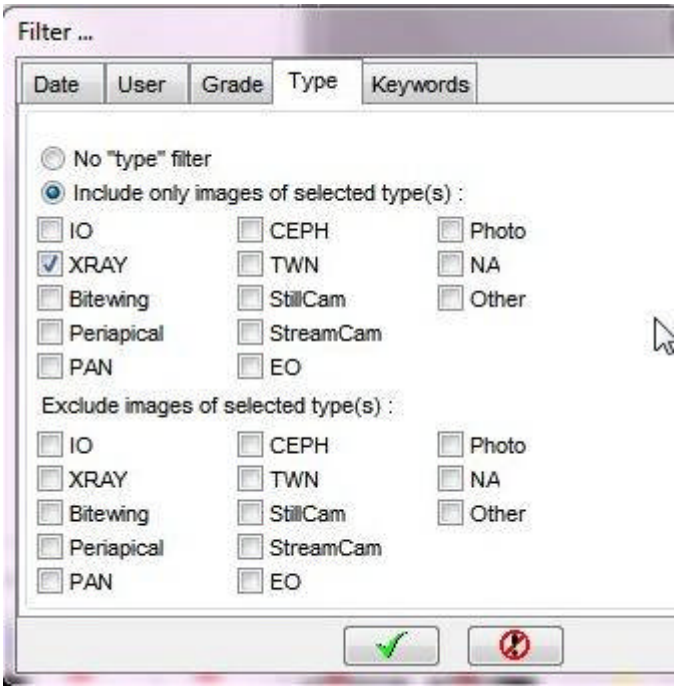
- You can also add this via the **Image Properties (Section 3.5.1)** afterwards.

To see all the images back, you will need to reset the Image Library. See the topic ***6. Resetting the Image Library***.

4. Search based on Type

Click on the **Type** tab and select a particular

For example choose for the type **XRAY**.



Always click to confirm.

As a result you will see the images where **XRAY** is associated with.

Again you can also choose to **exclude** the images where **XRAY** is associated with.

If you don't get any images back, it means no images have the association with **XRAY**.

To add the **Type** XRAY association:

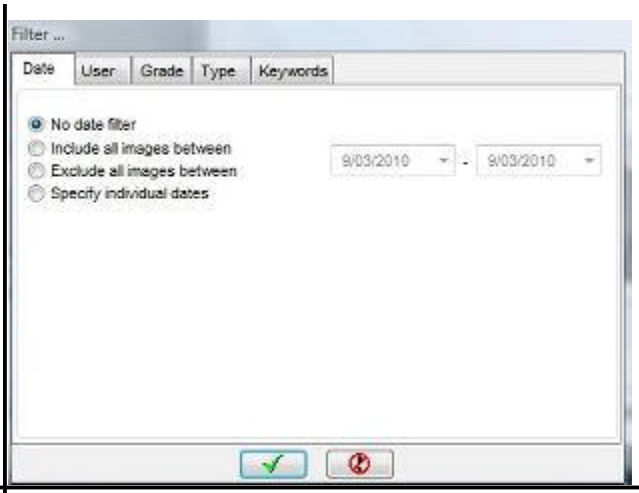
- See Also the topic **Specify Extra Info and Keywords (Section 3.5.2)** for more information.
- You can also add this via the **Image Properties (Section 3.5.1)** afterwards

To see all the images back, you will need to reset the Image Library. See the topic ***6. Resetting the Image Library***.

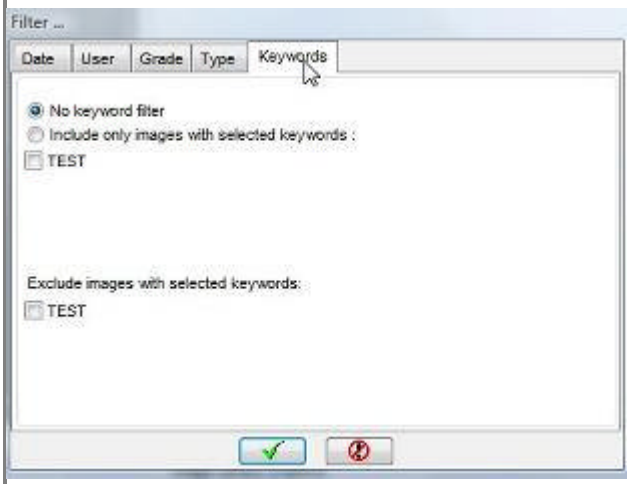
5. Search based on keywords

When you have saved an image with particular keywords, you have the possibility to search for images based on those keywords.

Action	Explanation
1. Go to Image Library 2. Click on the ***small looking glass icon*** in the Image Library. 	The following dialogbox will open:

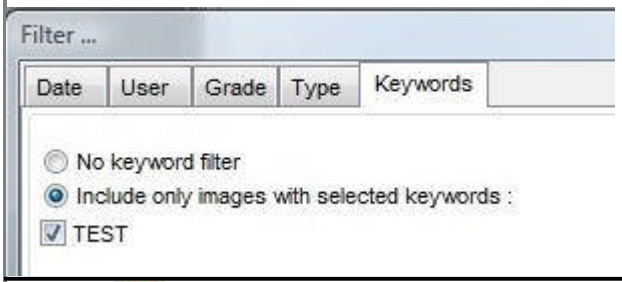


3. Choose the ***Keywords*** tab.



.

4. Select the ***TEST*** keyword.



We have added this keyword when we saved this image. See Also the topic **Specify Extra Info and Keywords (Section 3.5.2)** for more information.

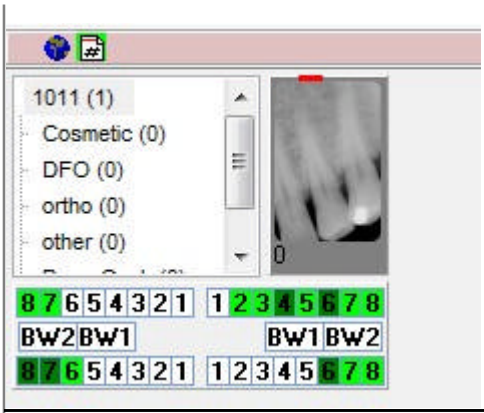
A second method to associate keywords is via the **Image Properties (Section 3.5.1)**.

4. Click to confirm.

.

5. ***Result*** : The image with the keyword TEST is found.

The **pink bar** is an indication that you have a **filter** active.



See ***6. Resetting the Image Library***	To see all the images back, you will need to reset the Image Library. See the topic ***6. Resetting the Image Library***.

To add the **Keywords** association:

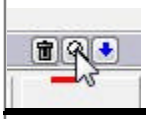
- See Also the topic **Specify Extra Info and Keywords (Section 3.5.2)** for more information.

- You can also add this via the **Image Properties (Section 3.5.1)** afterwards.

6. Resetting the Image Library

After you have filtered out a number of images, you may want to reset the Image Library to see **all the images again**.

Follow these steps to reset the Image Library.

Action
1. Click on the ***small looking glass icon*** again. 
2. Click the icon to confirm.

Associating additional information to images can be done in **2 ways**:

1. When **saving** the image: read the article **'Specify Extra Info and Keywords' (Section 3.5.2)** to understand the information and keywords you can associate to the images.

2. Add extra information or keywords via the **Image properties**. Read the article **'Image Properties' (Section 3.5.1)**.

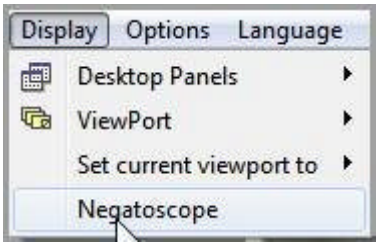
4.4 Mediadent image manipulation

4.4.1 How to activate the negatoscope

If you want to use your **PC screen** as **negatoscope** to show an X-ray, you have the possibility to activate the negatoscope in Mediadent.

Choose in the Mediadent Menu :

Display > Negatoscope



You will see the **white screen**.

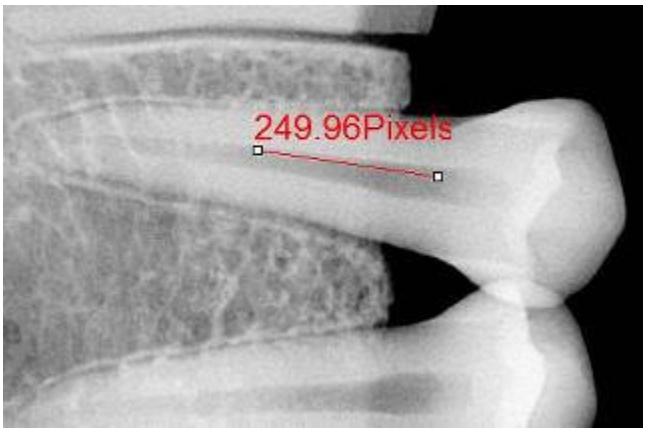
Now you can hold the X-ray against your PC screen.

To **return**, just ***click any key on the keyboard or click with the mousebutton*** on the screen.

4.4.2 How to calibrate an image

An image is not always **calibrated**, especially images you receive from an external source.

An indication that the image is not calibrated is when you draw a line via the Measure tab, the measurement of the line is in **Pixels** and not in mm.



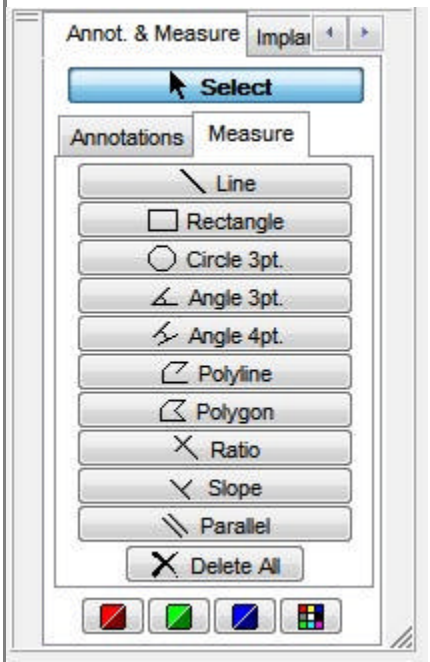
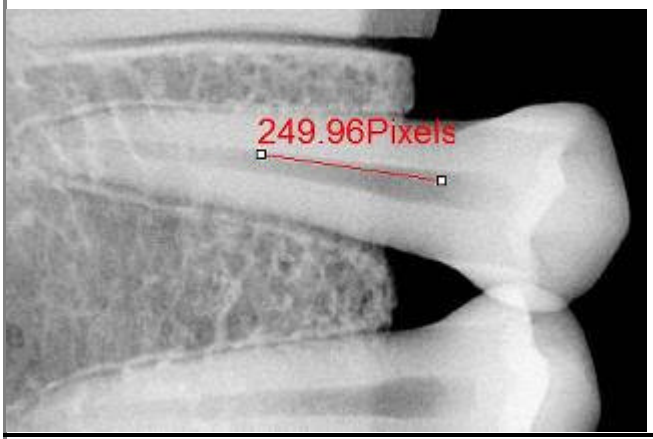
Calibrating an image is important when you start using **annotations**. When you draw annotations on your image you want to make sure they are relative to your image.

Especially when using the **implants module** the image needs to be calibrated.

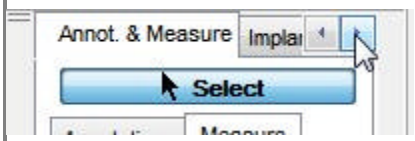
In this article we will explain one way of calibrating and image.

We will draw a line via the Measure tab and indicates its measurement. The line we will draw is **150mm** long.

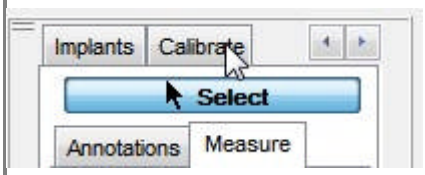
Action	Explanation
1. Load an image in the Viewport	

1. Click on the ***Annotations*** icon 	In the Iconset this is by default the third icon.
2. Draw a line via the Measure tab	
Choose the ***Measure tab*** in the Annotations and Measure dialog box. 	The Measure annotations will appear with a list of different annotations that can be added to the image. The usage is explained in the article **'Working with annotations' (Section 3.2.4)**.
Click the ***Line*** button 	.
Press and hold the ***LEFT*** mouse button while ***drawing a line*** on the image. 	You will notice that the measurement is in **Pixels**. This is an indication that the image is not calibrated.
3. Calibrate the image	

Click on the **small arrow to the right** to activate the calibration tab. *

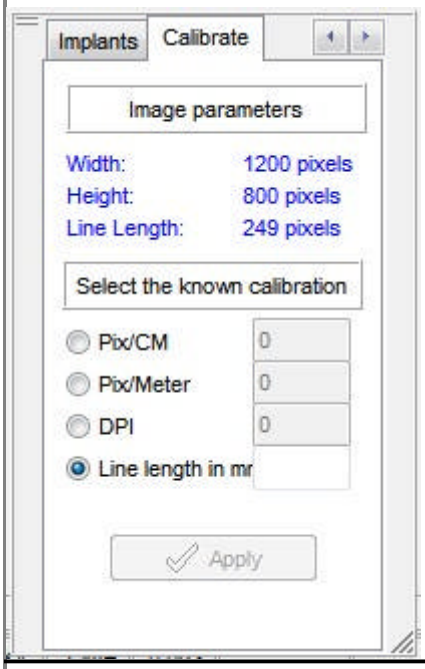


Click on the ***Calibrate tab***



* Only if you have the Implant module, you will have to do this step otherwise you will see the Calibration tab.

Choose ***Line length in mm.***

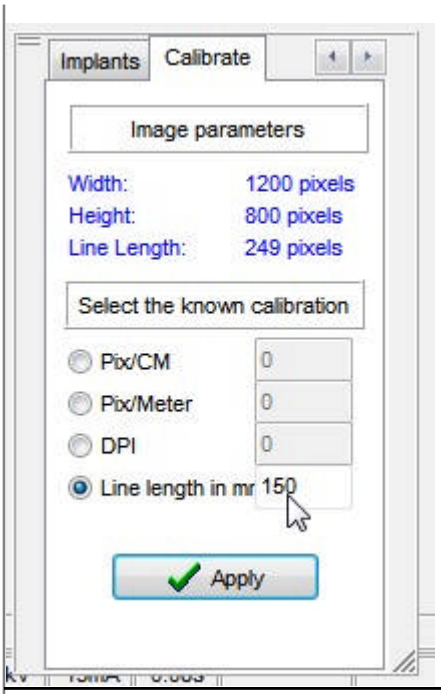
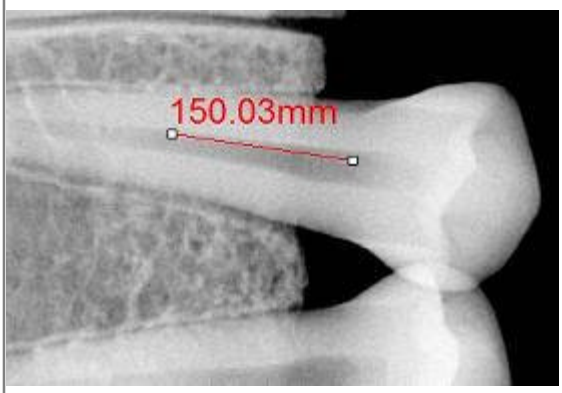


It is possible this is already selected.

In this example we have chosen for 150mm, this means the line we have drawn on the image is 150mm long.

It can be practical that when acquiring the image, you also integrate a **ruler**. In that way you can easily **calibrate** by using the ruler as a guide.

Fill in the **length in mm** of the line you have just drawn and ***Apply***.

<table>
<tr>
<td> 
</td>
<td></td>
</tr>
<tr>
<td> 
</td>
<td>Your image is calibrated.</td>
</tr>
</table>

4.4.3 How to recover a deleted image

You will be able to **retrieve** a deleted image from the **Recycle bin** if this has been activated in the **Mediadent Setup>General Settings.**

Read the article about the **General Settings (Section 7.2)** of Mediadent, topic **'How to avoid deleting files permanently'** to find out how to **recover** a deleted item from the Recycle bin.

4.5 The Mediadent status mount

4.5.1 How to create a status mount

Warning : Do not **modify** existing Status Mounts, since the changes will be removed when updating Mediadent.

You have the possibility to create **your own Status Mount**. This will allow you to create your own procedure (sequence) for the acquisition of images.

In the Status Mount you can **associate** teeth or tooth and if necessary to modify the **orientation** of the sensor.

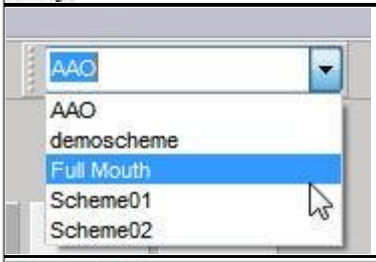
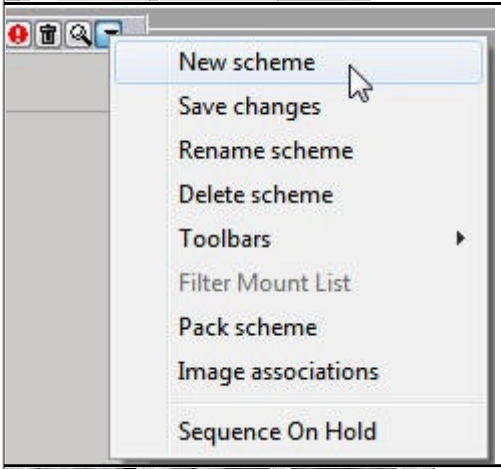
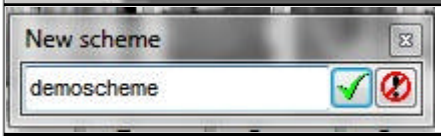
This is done in the following steps:

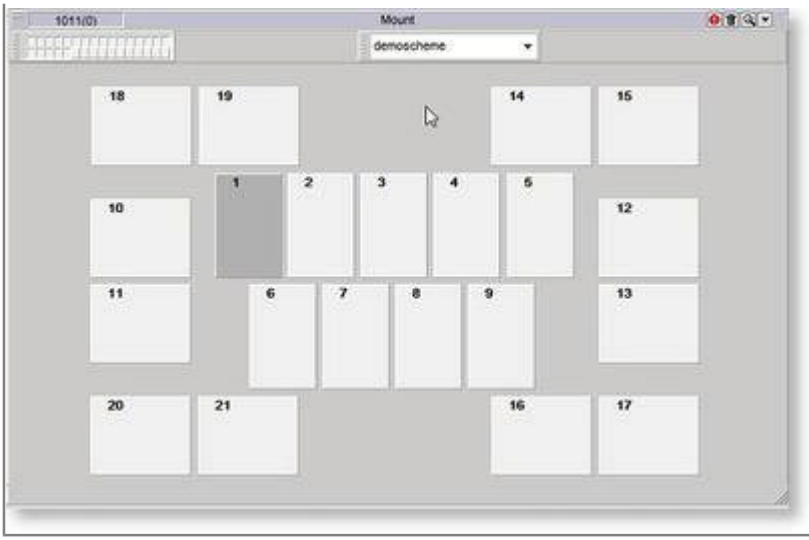
1. Create a Status Mount

⚠ Before you create a new Status Mount you have to be sure the **Desktop** is Unlocked.

This is done in the Mediadent menu: ***Display > Desktop Panels > Lock desktop*** (this option should **NOT** be checked)

If this option is checked, you will need to uncheck it by clicking on Lock desktop.

Action	Explanation
Create a Status Mount	
In Mediadent Menu : ***Display > Desktop Panels > Mount view*** ***or*** 	Activate the Status mount – See topic '**What is a Status Mount' (Section 9.3)**.
	Choose an **existing Status Mount** that is similar to the one you want to create.
	Go to the **Status mount controls** and click on the icon to expand the **Submenu**. Choose to Create a ***New Scheme*** from the menu
	Give the Scheme a **name**.

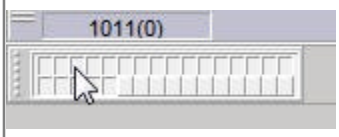
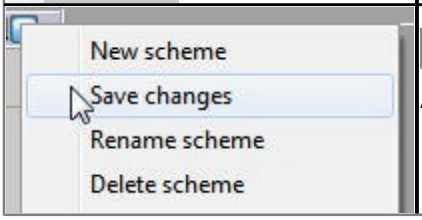


Result : A blank Status Mount with the Status Mount boxes as defined in the selected standard Status Mount, in this example the Full Mouth.

Now you are ready to adapt this Status Mount.

Now you can **activate** the desired Status Mount Boxes.

2. Activate the Status Mount boxes

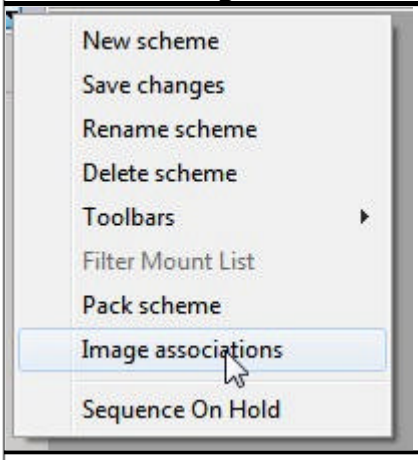
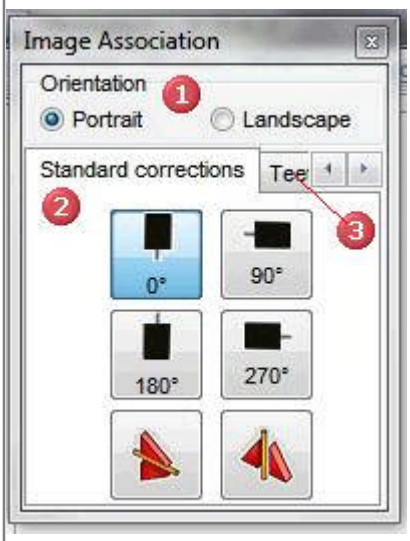
Action	Explanation
Add or remove Status Mount boxes	
	You can **add or remove** Status Mount boxes by using the **Image container configurator**. When a box is **pressed-in**, the Status Mount box is **visible** in the scheme When a box is **not pressed-in** the Status Mount box is **not visible** in the scheme Press on one of the boxes and a Status Mount box will appear. The box will **blink** which is an indication that it has just been added. The boxes are **numbered**, but they are not yet associated with a tooth or teeth.
	Because you have **Unlocked** the desktop you can **move the box** to another position in the Status Mount by using the **handle** (two little bars in the top left hand corner of the box).
	Don't forget to **Save** the scheme. Activate the **Sub menu** (Right hand top) in the Status Mount box.

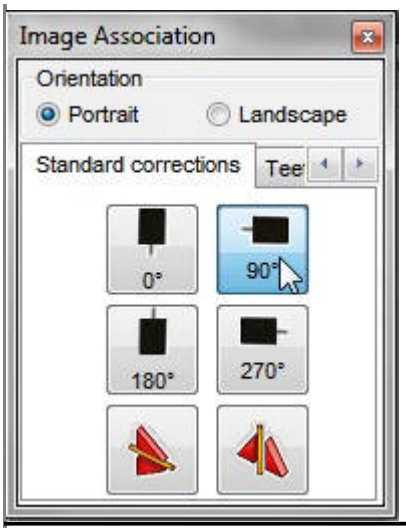
You can **repeat this process** (adding and/or removing Status Mount boxes) until you have defined the number of Status boxes you want in your Status Mount.

The next step is to determine **per Status Mount box**, the **teeth/tooth association** and if necessary change the **orientation**.

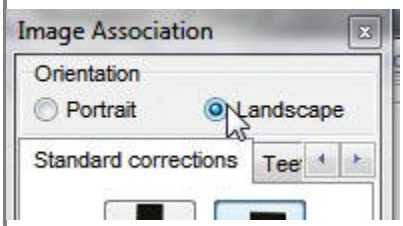
Afterwards we will define the **sequence** in which the images will be taken.

3. Associate teeth/tooth to the Status Mount boxes

Action	Explanation
Overview Image Association	
	You can **associate** a tooth or teeth by changing the properties of the box : **Select one of the Status Mount boxes**. You will notice when you select a box the color changes into dark grey. Choose in the ***Sub Menu > Image associations***
	The **Image association box** will appear: 1 Orientation: This will allow you to change the orientation of the Status Mount box. 2 The first tab **'Standard corrections'** represents the **orientation** of the digital sensor. This means if you are using the sensor to capture intra-oral images, you have the possibility to change the orientation via this screen. You also have the possibility to flip the images from left to right or from top to bottom depending on how the sensor is placed in the patient's mouth. 3 The second tab **'Teeth Chart'** is partly hidden and will allow you to **associate** a tooth or teeth with the Status Mount box.
Change the orientation	
Let's take a closer look at the tab **'Standard corrections'**	Depending on the way you place the sensor in the patient's mouth, you will be able to change the orientation.



In this example I will change the Status Mount box to **90°** which is the position in which I place the sensor in the patient's mouth.

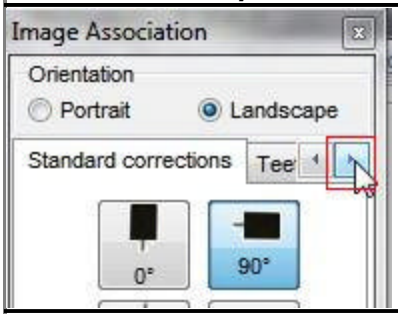


We can also change the visualization of the Status Mount box.

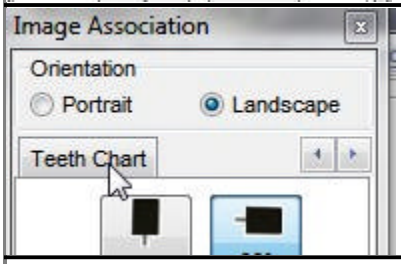
The image I want to take in the Status Mount box has to be in **landscape**, here I can change this.

You will see the Status Mount box orientation change into **landscape**.

Associate teeth/tooth to a Status Mount box



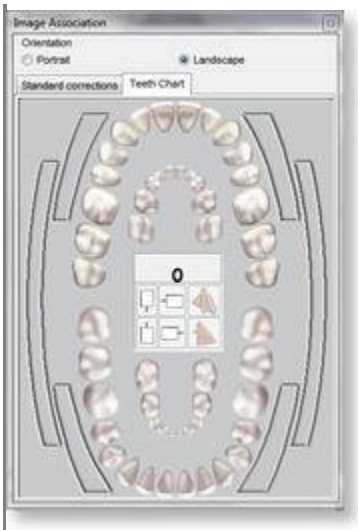
I will now **associate** teeth.
Click on the **right arrow** in the dialog box to view the teeth association tab.

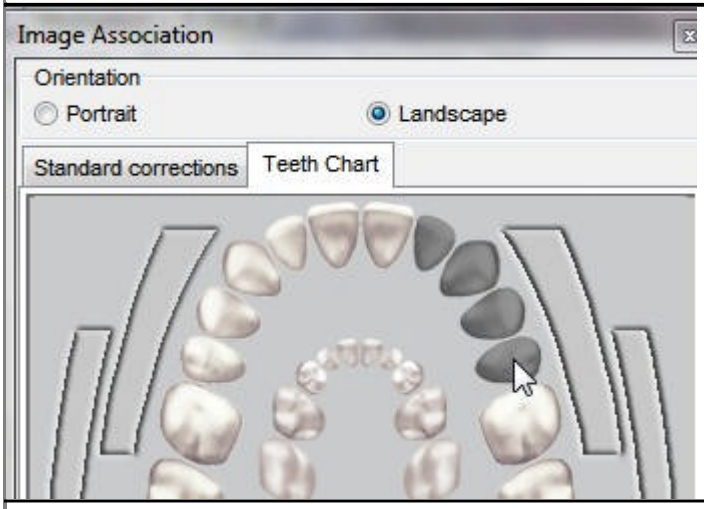


Click on the ***Teeth Chart*** tab

The **Teeth Chart** is presented

At this moment no teeth are associated to the selected Status Mount box.





You can now associate a few teeth to the Status Mount box.

In this example I will associate **teeth 22 to 25** to this Status Mount box.

You do this by selecting the teeth in the teeth scheme.

To learn more about working with the Teeth Chart, you can read the article **'Working with The Teeth scheme' (Section 3.3.1)**.

You need to **click on the Status Mount box** to confirm your association.

The result : The **name** of Status Mount box will change and reflect the **teeth association**.

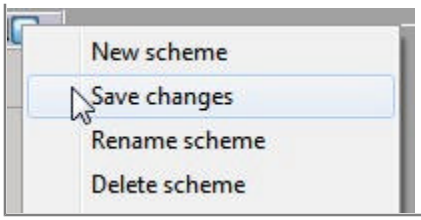
In the middle of the teeth chart you can indicate how the **sensor** will be placed in the patient's mouth (for example in an angle of 90°).

This will be linked to the Status Mount box by selecting this in the Teeth scheme.

You will see a **green dot** appearing, this means that this is the way the intra-oral sensor will be used.

Again, important is to **click on the Status Mount box** to save the changes made to the Status Mount box.

You will need repeat this process for every Status Mount box in the Status Mount.

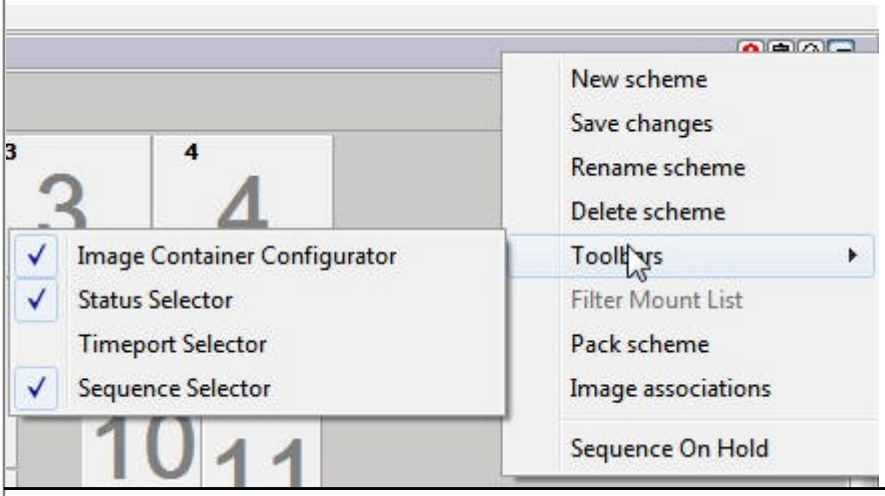


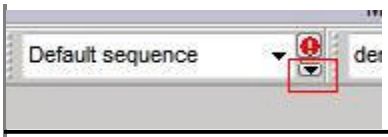
After you have repeated this process for all the Status Mount boxes, you need to **save** the status mount.

Activate the **Sub menu** (Top right) in the Status Mount box

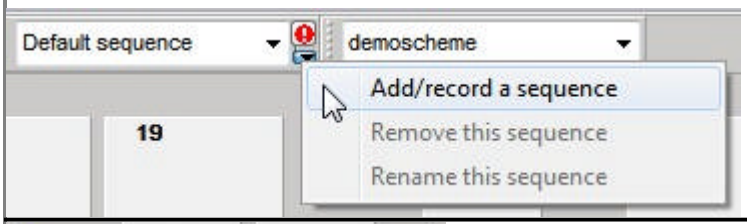
Once you have associated the teeth to the Status Mount boxes and you have associated the correct orientation you are ready to create your own **sequence** in which the x-rays will be taken.

4. Change the sequence for X-ray taking

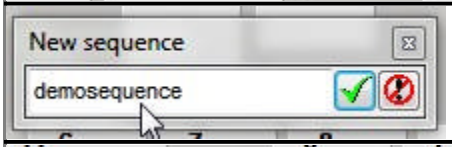
Action	Explanation
In Mediadent Menu : ***File> Acquire FMX*** **-or-** 	You can change the sequence in which the images need to be taken. To check the **order or sequence** in which the images will be taken you can go to the **Acquisition mode with Status Mount.**
Go to the **Status Mount Sub Menu** ***Select > Toolbars > Sequence selector*** 	Activate the **Sequence Selector Toolbar**. The toolbar will be visible and shows the Default sequence scheme.
	You can create your own sequence by clicking on the **small pull down arrow in the Sequence selector.**



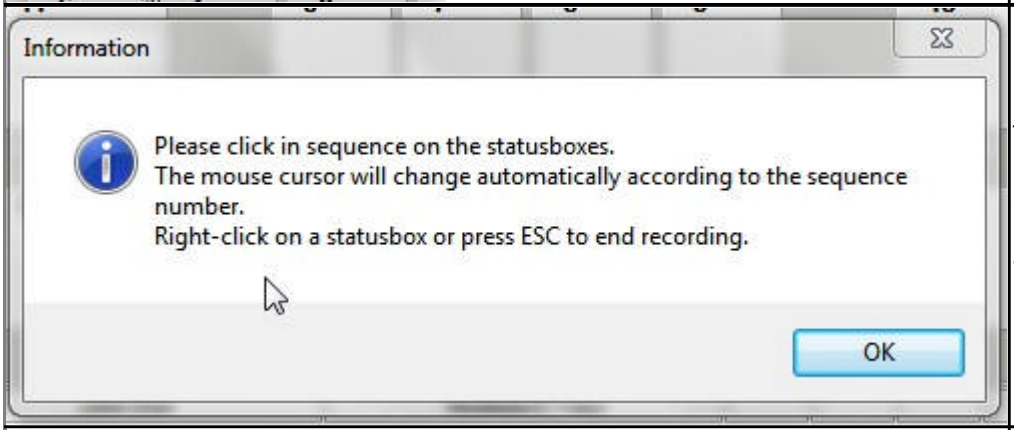
Choose ***Add/record a sequence***



This will bring up a **Sub Menu** where you can record your sequence.



First give the sequence a **name.**


Information
Please click in sequence on the statusboxes.
The mouse cursor will change automatically according to the sequence number.
Right-click on a statusbox or press ESC to end recording.
OK

The following information box will appear explaining how you can change the sequence of the status boxes.

Click on the Status Mount box where the **first image** has to appear.

Repeat this process until you have selected all the boxes.

The cursor will change into a **01**.

This is the sequence number.

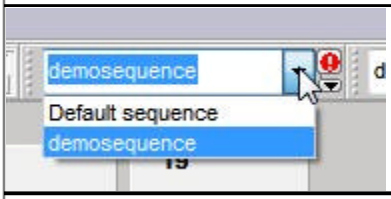
Click on the Status Mount box where the **first image** has to appear.

You will see the cursor change into **02**, now click on the Status Mount box where the **second image** has to be stored in.

The cursor will change into **03**, …

Repeat this process until you have selected all the boxes.

Once you have finished click on **Esc**

	or right-click on a status box.
	You will be able to select the new sequence that you have created.
	Don't forget to **Save** the Status Mount.

Now you are ready to use the new Status Mount! Read the article: **'Working with the Status Mount in Acquisition mode' (Section 3.4.2)**

4.6 Mediadent export/import

4.6.1 How to send an image by e-mail

Sending an image by e-mail can be practical if you want to **share** your images with colleagues or a hospital.

Within Mediadent it is possible to send an image, but you will need to have an **e-mail system** installed on your PC. Examples of most common e-mail programs are Outlook, Outlook Express, etc.

Before you sent an image via Mediadent, you need to **test** if your e-mail system is working by sending an e-mail message via your e-mail program.

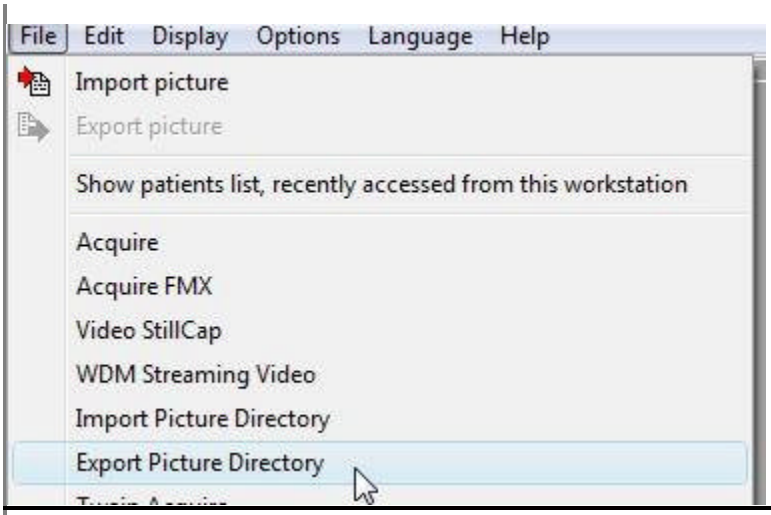
There are **2 ways** in which you can sent images via your e-mail program.

1. **Drag and drop** an image in an e-mail. Read the following article: **How to drag and drop an image in an e-mail (Section 4.6.2)**.

2. Via the **Export Picture Directory**.

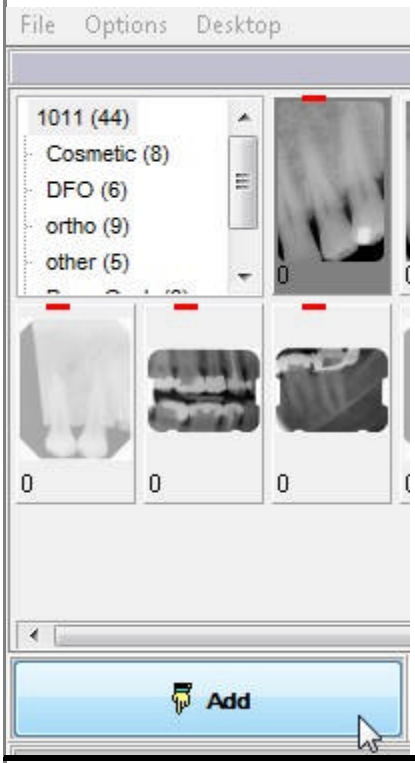
The **second method** is explained in this article.

Action
1. In the Mediadent menu you will find the feature in ***File > Export Picture Directory***



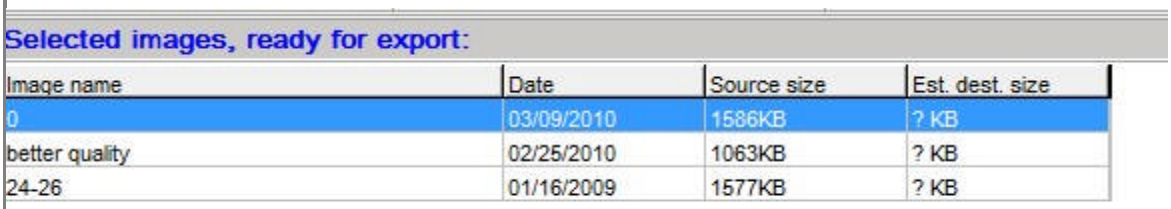
To get a detailed description of the screen elements, read the topic **'Export Picture Directory screen' (Section 3.1.2)**.

2. ***Click*** on the image you want to send.



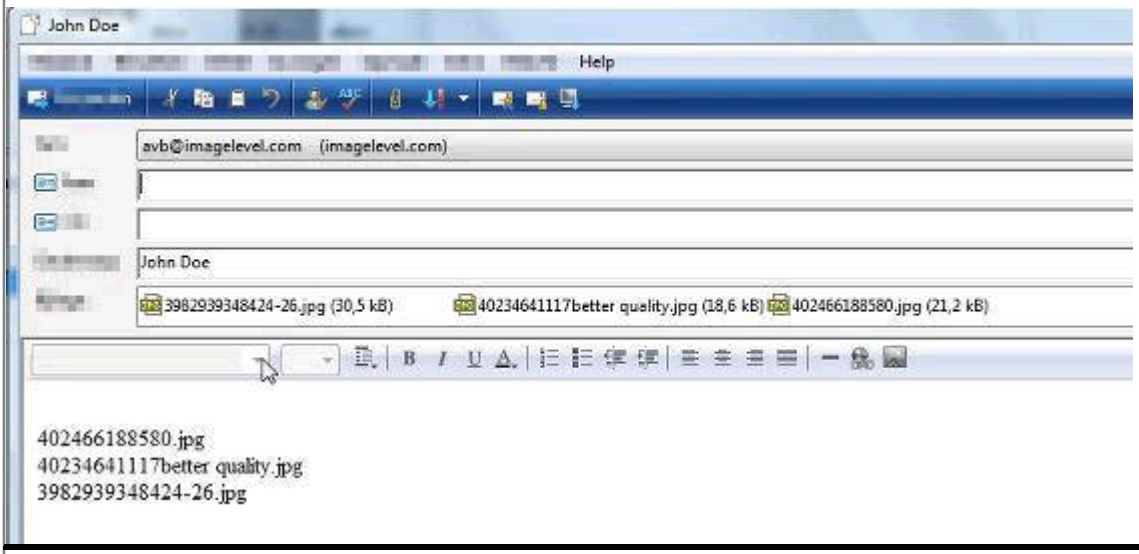
3. Choose '***Add'.***

4.The **image** will appear in the **list:**



5. Choose the ***e-mail button***.

6. Your **e-mail program** will launch and the image will be attached to the e-mail.



7. ***Fill in*** the recipients names and send the message.

Use the ***'Estimate' button*** to get information on the file size. Some **e-mail systems** do not allow you to sent more than 5 MB. With the 'Estimate' button you will see the MB size of your attachments to the mail. If it is bigger than the allowed size, you will be able to sent your image in separate e-mails. Find more information about the screen elements and buttons in the topic **'Export Picture Directory screen' (Section 3.1.2)**.

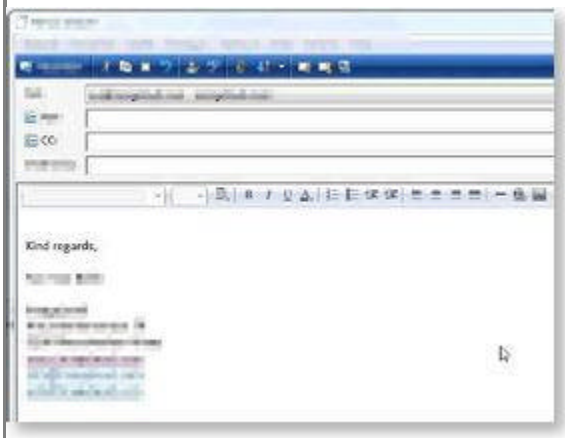
4.6.2 How to drag and drop an image in an e-mail

For your convenience we have the possibility to **drag and drop** images to your **e-mail** environment. This is the fastest way for you to sent images.

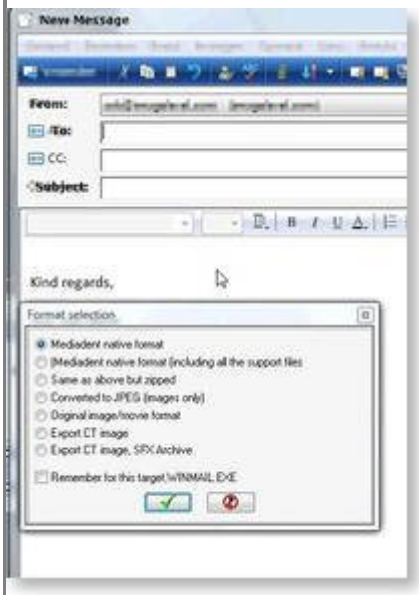
Of course you will need an e-mail environment to be able to do this. Also, always check if your e-mail environment is working before you try to sent an e-mail with images from Mediadent.

To be able to drag and drop images from Mediadent to your e-mail program, **both programs (Mediadent and your e-mail program) have to be open**.

Action	Explanation
1. Open your e-mail program and create a **new message**.	When you open your e-mail program and create a new message, an additional icon will appear in the taskbar on the bottom of your screen. Your e-mail program is visible on the bottom of the screen and is accessible from Mediadent.

	 It is important to have these icons at the bottom of the screen, because you will drag & drop the images on the icon of **'New Message'**.
2. Go to Mediadent and select the image you want to sent.	You can select more than 1 picture by pressing the key on the keyboard while selecting the images you want to sent.
3. Pick the image(s) you want to sent. 4. **Drag and drop** the image onto the ***New Message*** icon in the taskbar. 	To drag and drop you have to **press and hold** the **LEFT** mouse button while dragging the image **onto** the **New Message icon** on the Windows taskbar.
5. The New Message will **open** and you will see your **mouse cursor** with a small **+sign**. 	The small +sign indicates that you are copying an image to the message.
5. Release the left mouse button in the body of the message.	You can release the left mouse button in the **body** of the message.
You will be prompted with the	This will only occur the **first** time you drag and drop an image, or you have not saved the format settings. You will need to choose one of these options. 1. If the **recipient** has **Mediadent**, you have the possibilities to choose the following formats: - Mediadent native format - Mediadent native format (including all support files) : most complete option -Same as above but zipped: this means all the files get compressed into 1 file that the recipient can Extract.

following screen.



2. If the recipient does **not** have **Mediadent** you can convert the image to **JPEG**.

- Converted to JPEG: the files get converted to JPEG format.

3. Other formats

- Original image/video format

- Export CT image or Export CT image SFX Archive: when applicable

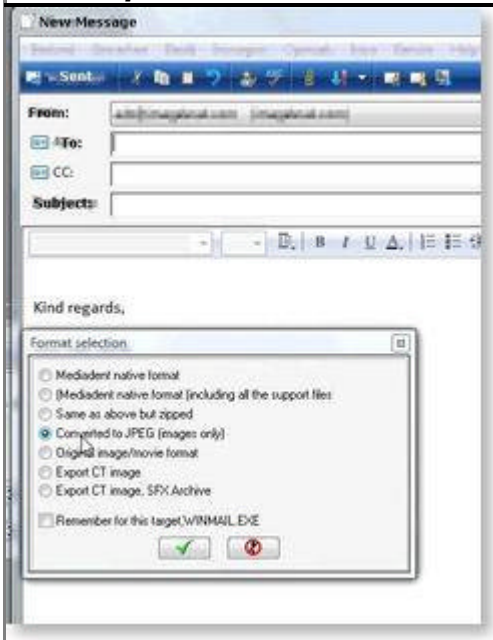
Turn this **flag ON** if you don't want to get this screen again.

If you have ticked this option, Mediadent will **always** sent your images in the format you just indicated.

If you want to get this screen again after you have ticked this option, you need to drag and drop your image with the **CTRL** key pressed. So you need to press and hold the **CTRL + LEFT mouse button** while dragging your image.

If you know you will have to change the format often, **do not** check this option and you will be presented with this screen every time and you are free to choose the format you want to sent your image in.

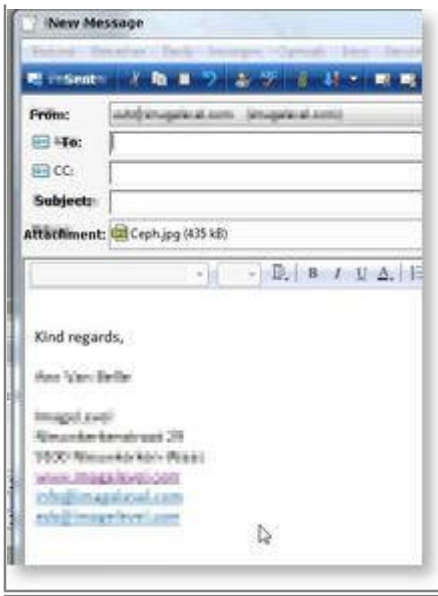
6. Example: We will choose JPEG format..



Once you have chosen a format you will see the image file(s) appear as attachment to your mail.

You can now fill in the name of the recipient and sent the mail.

Be aware that some e-mail environments are **limited** to the file size you can sent. You can limit the file size by choosing ***'Same as above but zipped'***.



In this case we have chosen for JPEG format. The file is now an attachment in this e-mail.

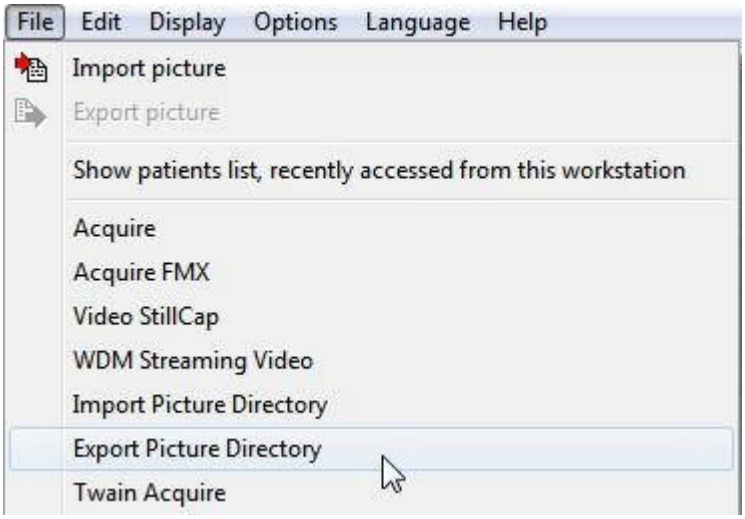
4.6.3 How to export multiple pictures of a patient

Sometimes it can be necessary to export a number of images from a particular patient so they can be shared with colleagues and patients.

💡 To export **1 picture**, choose for ***File > Export picture*** in the Mediadent menu.

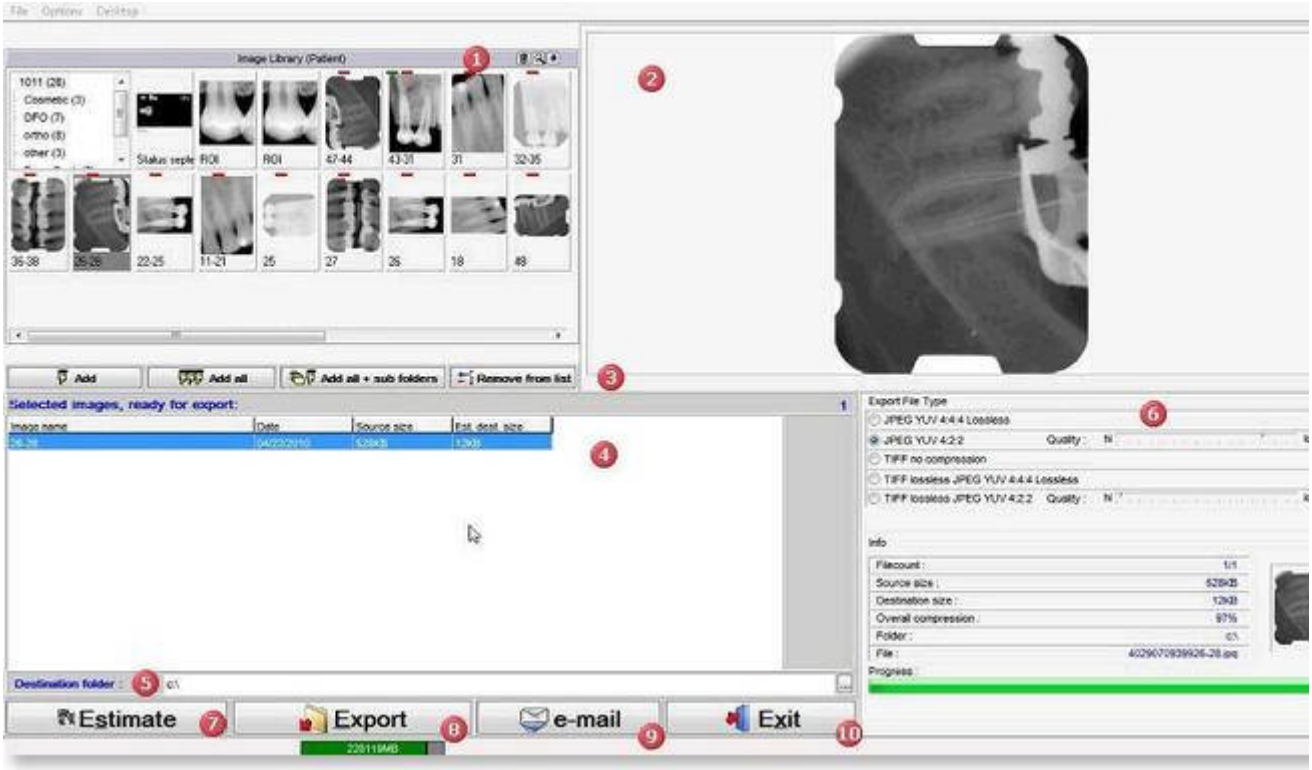
If you want to export **multiple images**, you can use the option **Export Picture Directory**.

Go to the Mediadent Menu and choose ***File > Export Picture Directory***



1. Overview of the Export Directory screen

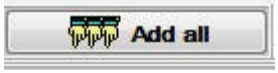
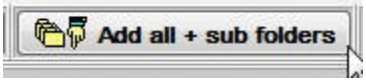
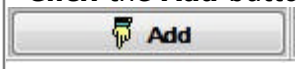
You will be presented with the following screen:



1	Image Library of the selected patient.
2	Viewport: you can preview an image before exporting it.
3	Action buttons: • ***Add***: this will add the selected picture • ***Add all***: this will add the pictures in the selected folder of the library • ***Add all+folders***: this will add all the images of this patient • ***Remove from list***: select the images to be removed from the list
4	List of files to be exported.
5	Destination folder: the folder you want to export the images to.
6	Additional information Export File Type: gives you the possibility to change the file type in which you want to export the files into. Info: gives extra information on the size of the file, the number of files ... that will be exported. This information will be filled in when clicking the ***Estimate*** button.
7	***Estimate button***: This action button will **calculate** the file count, source size, destination size, overall compression, folder, files ... This information will be filled in the the Info box 6
8	***Export button***: This action button will **export** the files in the list 4 to the destination folder.
9	***E-mail button***: This action button will launch your **e-mail application** and attach the images in the list to an e-mail.
10	***Exit***

2. Exporting images

To export multiple files from a particular patient follow these steps:

Action	Explanation
1. In the Mediadent menu choose ***File>Export Picture Directory***	.
2. **Select** the images you want to export. **Method 1:** select the images one by one **- *Click*** on the image with the left mouse button to select the image If you want to select **more than 1 image**, you can **press** and **hold** the **CTRL** key and select the images you want to export.	There are different ways to select images you want t export. You do not have to select the images one by one. **Method 2:** If you want to export the images from **selected folder** you can use the action button  **Method 3:** If you want to export the images from particular folder and all the underlying **sub folde** use the action button 
3. **Add** the images to the export list **- *Click*** the **Add** button  	Click the ***Add button*** to add the selected images to export list. To remove an image from the list, select the imag and click the button **Remove from list**
4. Determine the **destination folder** **- *Click*** on the **small button** next to the Destination folder entry box to open de Windows dialog box **- *Select*** the correct folder you want to export the images to	The destination folder is the folder on your PC where want to store the images. In this example we will export the images to **c:\exported images.**

5. Get an **estimation** of the file size

- *Click* the **Estimate** button

Before you export the images to your PC you might
to get an idea of how **large the file** will become wh
exporting the files. You can use the estimation butto
this.

6. **Export** to the folder

- *Click* the **Export** button

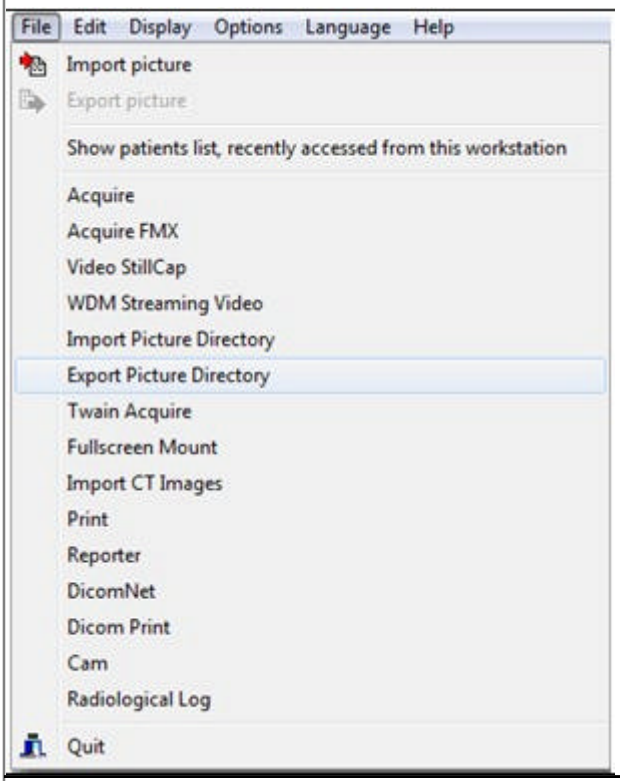
This will export the files to the selected folder.

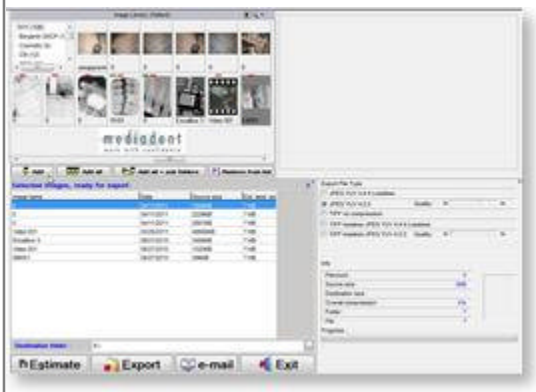
4.6.4 New: How to burn a CD with images from Mediadent

It can be practical to put the images stored in Mediadent on a CD or DVD.
This is possible through the **Export Picture Directory** option in Mediadent.

If you have a **Vista** or **Windows 7** machine, you can do this directly from Mediadent.

For other operation systems, like **Windows XP**, you have to install a **packet writer** software. This will create an extra drive letter on the computer**.** Use this drive letter in Mediadent (Step 4.).

Action	Explanation
1. Verify your the disc drive letter.	Place an **empty CD or DVD** in the disc drive of your computer, and verify the **driver letter**. You can do this with the file explorer of windows - in this case it is letter **F:**
2. In Mediadent, choose ***File > Export Picture Directory*** 	.
3. Select the **drive letter** as destination folder at the bottom of the export window.	.
4. The folder browser opens, navigate to the disc drive, select it and click OK.	For Windows 7 or Vista, indicate the drive letter where the CD or DVD is inserted. For windows XP, indicate the drive letter created by packet writer software.

5. We advice to choose the first option '**Like a USB flash drive'**. 	⚠This step is only applicable if you have **Vista** or **Windows 7**. Make sure a new CD of DVD is in the disc drive. Windows will ask in which format you want to use the CD. If you choose '**Like a USB flash drive'**, you can use the CD multiple times, this means, afterwards you can burn additional pictures to the same CD. If the option '**With a CD/DVD player'** is chosen, the disc will be opened with an interface.
6. Select the images and click on the ***Export*** button. 	Select the images, videos or documents you would like to export, by selecting the files in the Image Library and click on the ***Add*** button, if you like to export them all, please click the export all button When all the files are selected, please click the ***Export*** button, the CD will be written. If the progress bar is full green, the export is done, and the CD can be ejected. (Windows will close the write session on the CD automatically.)
7. Click on the ***Exit*** button.	You will leave the export window and return to the Mediadent main screen.

4.7 Mediadent automatisation

4.7.1 How to create a macro

What is a macro?

A macro is often used for **repeating tasks**. For example if you often have to choose between acquisition devices you have the possibility to automate these steps.

To **create** a macro, you will **record** a number of keystrokes or menu options. Afterwards you can **play** the macro that has been recorded. You can use a **function key** or an **icon** in the Icon set to play the macro.

It can be compared to a recording of music that you play over and over again.

A macro can be used in the following scenario :

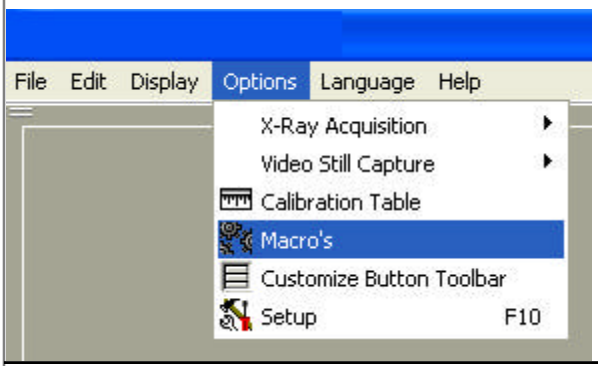
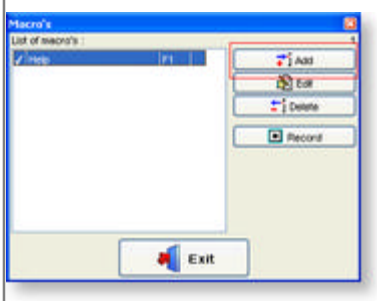
You need to make images using **2 different devices**.

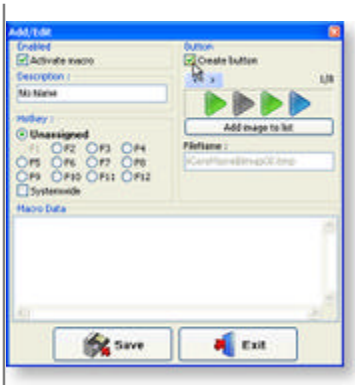
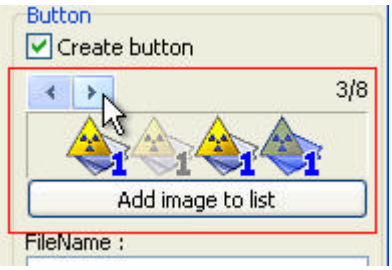
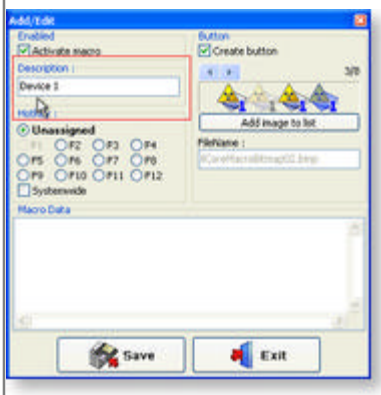
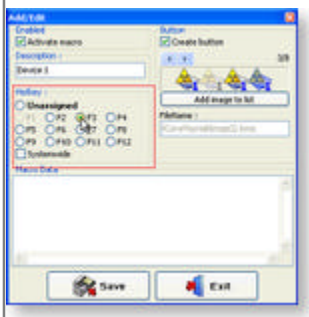
To switch between the machines you will always need to go to the **Mediadent Menu** and choose ***Options*** > ***X-Ray Acquisition*** > (device of your choose).

You will create a macro in Mediadent in these 2 steps:

1. **Assign** one of the icons or function keys you will use to **play** the macro. Optionally you can assign a Hotkey* to the macro.
2. **Record** the macro. Record the keyboard stokes or menu options.

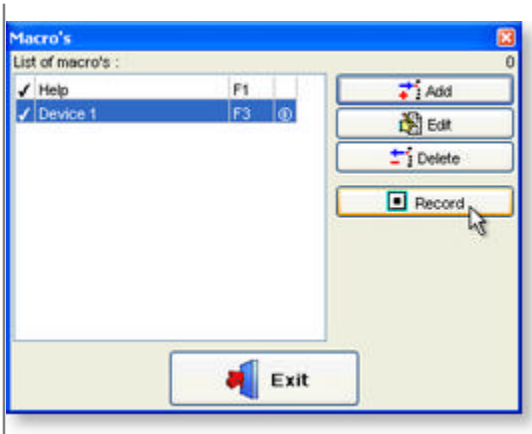
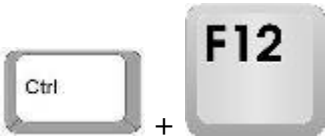
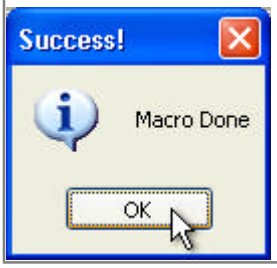
Step 1: Assign an icon/hotkey

Action	Explanation
1. In the Mediadent menu choose ***Options*** > ***Macro's***  File Edit Display Options Language Help X-Ray Acquisition Video Still Capture Calibration Table Macro's Customize Button Toolbar Setup F10	Activate the Macro's menu.
2. Click on the ***Add*** button. 	The Add button allows you to create a new entry in the list of macro's.
3. Click ***Create Button*** and choose one of the **icons** via de scrollbar	In this dialog box you will need to activate

	***Create button*** and scroll through the scroll bar to choose one of the icons by clicking on it.  Afterwards you will attach a macro to this icon.
4. Fill in the **name** of the macro in the Description field. 	Now you have chosen the **icon**. You will also need to give your **macro** a name. In this example I filled in 'Device 1'.
5. Optional : You can assign a **Hotkey**. This is the shortcut you can use to activate the macro. 	For example **F3** means you can use the **Function key F3** (normally found on the top of your keyboard).
6. Click on the ***Save*** button	.

Step 2: Record the macro

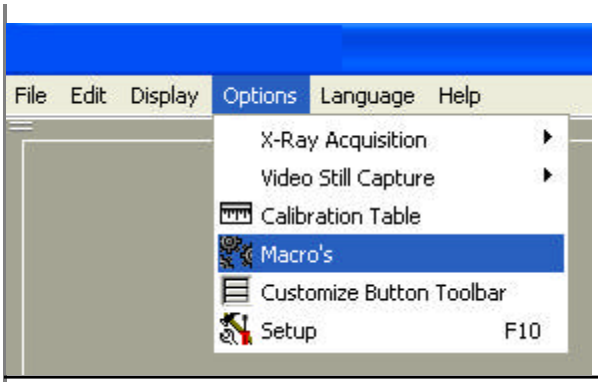
Actions	Explanations
1. Click on the ***Record*** button.	This screen shows that you have created a

	**macro** with the name **Device 1** and you have assigned the **Function key F3** to it. Now we are ready to record the macro. Recording a macro means that you are going to record the steps you want to save in the macro.
4.Click ***OK*** 	The dialog box will explain you use **Ctrl+F12** (Function key F12) to finish the recording. 
3. Start recording your steps	See the steps you can record in the **Example: creating a macro**.
4. When finished recording press the key combination ***Ctrl + F12.***	This will end the recording
5. Click ***OK*** 	OK to confirm the recording is done.

In the example we will explain how you can create a macro to automatically select the demo sensor. You can re-use this example to automatically select your own devices.

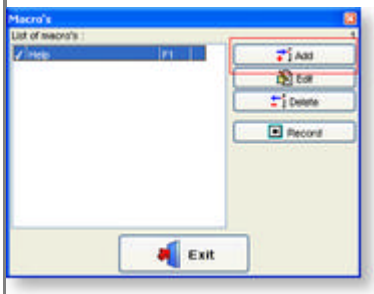
Example: creating a macro

Actions	**Explanations**
Step 1. Activate an icon	
1. In the Mediadent menu choose ***Options*** > ***Macro's***	



Activate the Macro's menu.

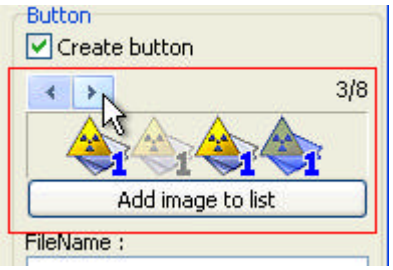
2. Click on the ***Add*** button.



The Add button allows you to create a new entry in the list of macro's.

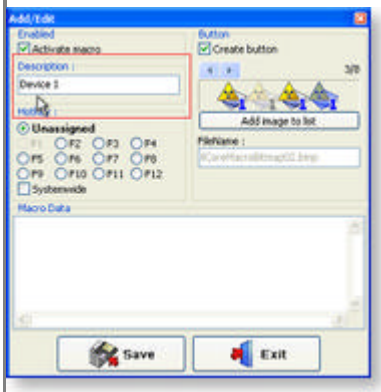
3. Click ***Create Button*** and choose one of the **icons** via de scrollbar

In this dialog box you will need to activate ***Create button*** and scroll through the scroll bar to choose one of the icons by clicking on it.



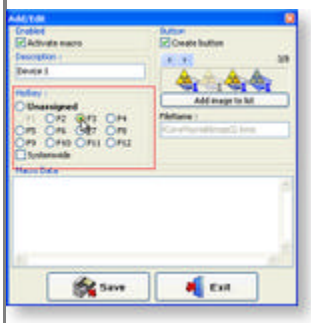
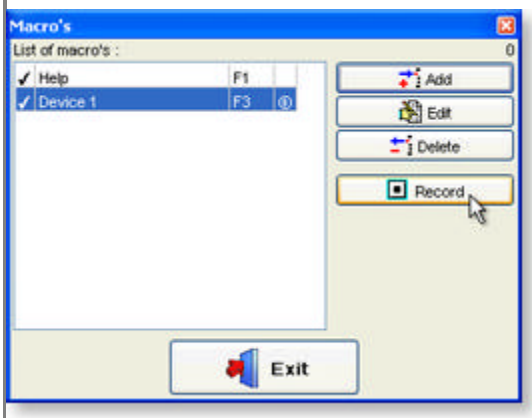
Afterwards you will attach a macro to this icon.

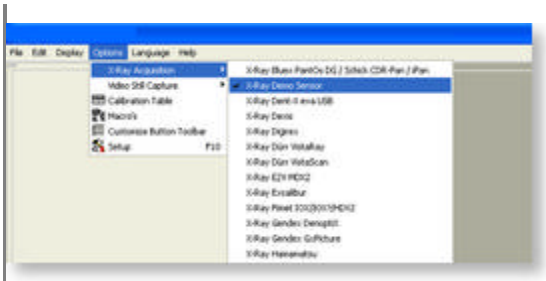
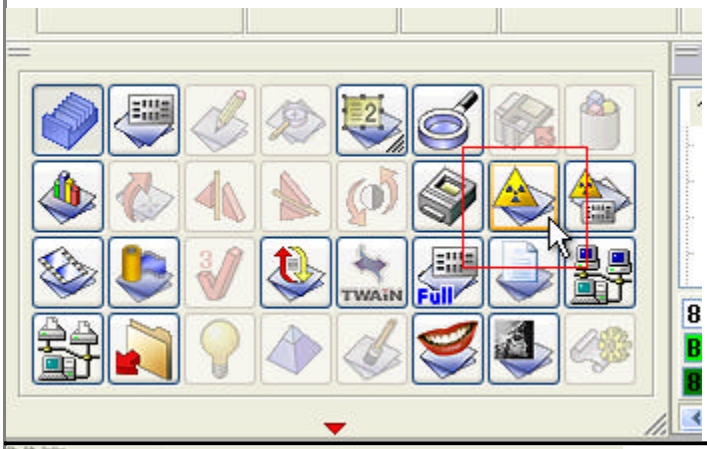
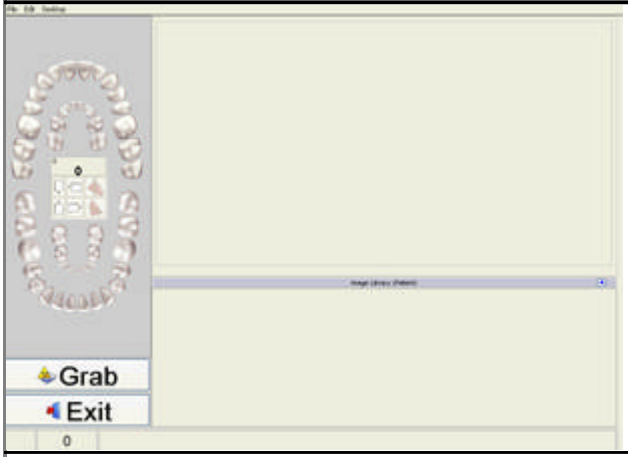
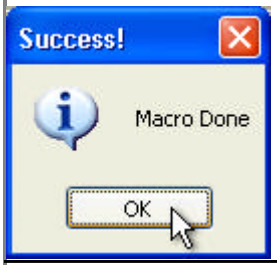
4. Fill in the **name** of the macro in the Description field.

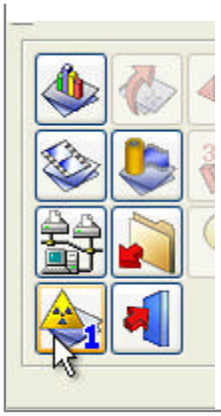


Now you have chosen the **icon**. You will also need to give your **macro** a name.

In this example I filled in 'Device 1'.

5. Optional : You can assign a **Hotkey**. This is the shortcut you can use to activate the macro. 	For example **F3** means you can use the **Function key F3** (normally found on the top of your keyboard).
6. Click on the ***Save*** button	.
Step 2. Record the macro	
7. Click on the ***Record*** button. Go through the **steps** you want to record in the macro. 	This screen shows that you have created a **macro** with the name **Device 1** and you have assigned the **Function key F3** to it. Now we are ready to record the macro. Recording a macro means that you are going to record the steps you want to save in the macro.
8.Click ***OK*** 	Once you are finished with all the steps you want to record in your macro you can use **Ctrl-F12** to stop the recording.
Step 3 Example : Recording the steps for automatically selecting the X-Ray Demo sensor	
9. Choose ***Options*** > ***X-Ray Acquisition*** > ***X-Ray Demo Sensor***	These are the steps I want to record

	in my macro.
10. Click on the ***Acquisition*** icon in the iconbar 	Click on the icon.
	The **screen** of the acquisition device opens. Depending on the device you have chosen you will get other screens.
11. To end the recording ***Ctrl + F12***	Use the key combination Ctr + F12 (Function key 12)
12. Click ***OK*** 	.
13. **Test** the macro by clicking on the **Icon** you have assigned the macro to or use the **Hotkey** combination.	

	In my case I assigned the macro to the icon.

5 New: Quick Reference

5.1 New: Overview icons

In this article we will briefly explain the usage of the iconset and give an overview of the different icons and their function.

It will offer **a great overview** of the possibilities of Mediadent.

When an **image is loaded** into a Viewport, you will see the active relevant icons.

Icon	Explanation
	Icon to activate the **Image Library**. The image library contains all the images of the selected patient. Articles concerning the Image Library: **Working with the image library (Section 3.5.3)** **Change the order of the images (on-line documentation)** **How to search for images (Section 4.3.3)**
	Icon to activate the **Status Mount**. If the icon has a green glow it means that there are a number of Status Mounts defined. Articles concerning the Status Mount: **A status mount (Section 9.3)** **Working with the status mount in acquisition mode (Section 3.4.2)**
	Icon to activate the **Annotations**. Article concerning the Annotations: **Working with annotations (Section 3.2.4)**
	Icon to choose the shape of the **Region of interest**. **Press and HOLD the left mouse button** until the icon expands. Article concerning the Region of interest:

	Working with region of interest (Section 3.2.6)
	Icon to choose the number of **Viewports**. **Press and HOLD the left mouse button** until the icon expands. Articles concerning the Viewports: **A viewport (Section 9.1)** **Working with viewports (Section 3.1.3)** **Manipulating the Viewport (on-line documentation)**
	Icon to activate the **Zoom Window**. Article concerning the Zoom Window: **Working with the zoom window (Section 3.2.5)**
	Icon to **save** the image. Articles concerning saving images: **Saving an image (Section 2.4)** **Overview of the specific Extra Info and Keywords (Section 3.5.2)**
	Icon to **delete** the active image. Articles deleting images: **How to recover a deleted image (Section 4.4.3)** **Working with the image library (Section 3.5.3)**
	Icon to activate the **histogram**. Articles concerning the histogram: **How does the histogram work? (Section 9.5)** **Working with windowing (Section 3.2.2)**
	Icon to **rotate** the active image.
	Icons to **flip** the vertical or horizontal.
	Icon to **invert** the active image.
	Icon to **print** the images. Articles concerning printing images: **Printing images (Section 2.5)**
	This is one of the most important icons in Mediadent. When clicking on the icon, you will launch the **acquisition mode** and you will be able to use your acquisition device. Articles concerning acquiring images: **Acquiring an image (Section 2.2)** **Working with the status mount in acquisition mode (Section 3.4.2)**

	Icon to make **acquisition** through the **Status Mount**. Articles concerning the Status Mount: **A status mount (Section 9.3)** **Working with the status mount in acquisition mode (Section 3.4.2)**
	Icon to activate the **Video Still Capture** module. This module will allow you to use your camera to take pictures. Article concerning the Video Still Capture module: **Working with the Video Still Capture module (Section 3.7.1)**
	Icon to activate the **WDM Streaming Video** module.
	Icon to activate one of the **optimization** profiles. The optimalisation profiles can enhance the quality of the images. **Press and HOLD the left mouse button** until the icon expands. Articles concerning the optimization profiles: **Working with the optimize feature (Section 3.2.8)** **The optimize module (Section 8.1)**
	Icon to reload the **original saved image**. The orginal image can always be retrieved.
	Icon to activate the devices that use the **TWAIN interface**.
	Icon to activate the **Full Screen status** screen.
	Icon to launch the **Reporter module**. The Reporter module is a seperate module. If you do not see this icon, it has not been activated. Contact your dealer for more information. If the icon has a green glow it means that there are documents for that patient in the Reporter module. Articles concerning the Reporter module: **Working with the Reporter Module (on-line documentation)**
	Icon to launch the **Dicom network** module.
	Icon to launch the **Dicom print** module.
	Icon to apply an **auto contrast** to the image. Articles concerning filters: **Working with Filters (Section 3.2.7)**
	Icon to apply the **sharpen filter** to the image.

	Articles concerning filters: **Working with Filters (Section 3.2.7)**
	Icon to apply a **noise reduction filter** to the image. Articles concerning filters: **Working with Filters (Section 3.2.7)**
	Icon to apply the **cosmetic** module.
	Icon to apply **filters** to your image. Articles concerning filters: **Working with Filters (Section 3.2.7)**
	Icon to **exit** Mediadent. Mediadent can be configured NOT to close, this will speed up the process of launching Mediadent through a a patient management system.

You can **hide** unused icons. Read the article **How to customize the iconset (Section 4.2.2)** to learn how to do this.

6 New: Questions and answers

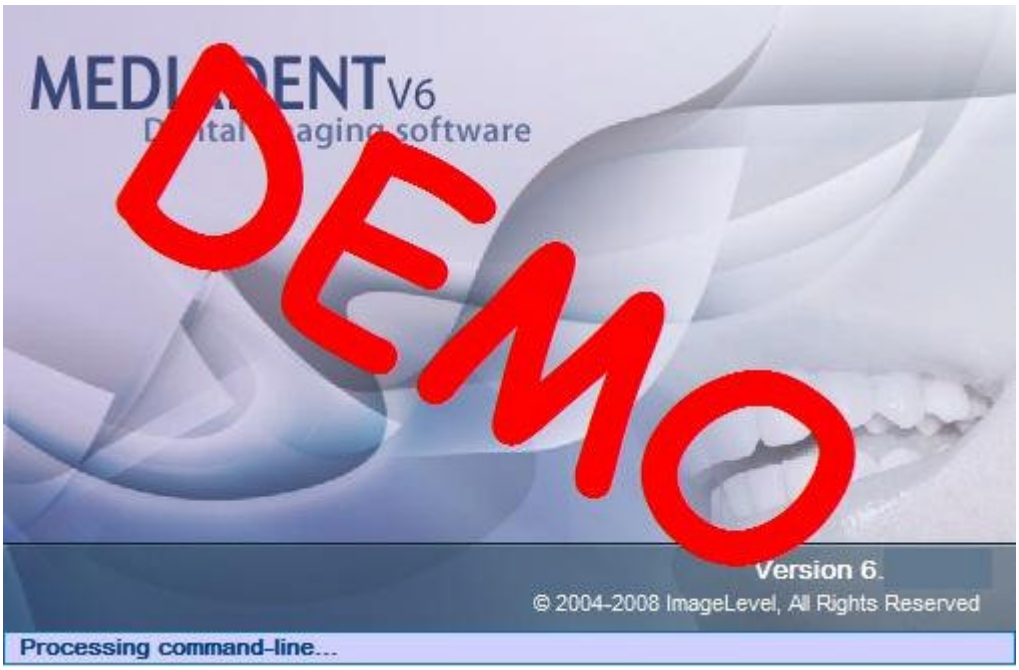
This sections gives an overview of support issues we encounter frequently.
The issues are described and possible solutions are proposed.

New: What to do when Mediadent launches in DEMO mode? (Section 6.1)
(Section 6.1)

6.1 New: What to do when Mediadent launches in DEMO mode?

Symptom

When I launch Mediadent I get the word '**DEMO**' in red on the screen.



Description

The Mediadent software works with a special USB key or parallel **security** dongle.

Pictures of the parallel keys:

Picture of the USB security dongle:

When Mediadiadent launces in demo mode this can have **several causes**, for example:

1. If this key is **not accessible** on your PC or on the server, Mediadent will launch in demo mode.

2. Another cause can be that the key is **no longer valid** for the installed version of Mediadent

Solution

This problem should be handled by your dealer, but before contacting them you can check the following:

1. Please locate the USB key or parallel key. You will recognize this key because it has a green sticker on it with a number starting with U or N. (U is a single user and N means network).

2. Make sure the key is inserted in the USB port or the parallel port of your PC, or in the case of a network installation on the machine that acts as a server.

3. Check if the key is working correctly (In the case of the USB key you will see a small green light, this is an indication that the key is working properly) - please contact your dealer if you suspect your USB key is broken.

4. In case of a **network installation**, make sure that the **server** with the key is **turned on** and that you have access to the server. You can restart the server and test if Mediadent launches normaly.

5. Your **firewall** and or **anti-virus product** can be blocking the access to the security dongle. To test this, turn off the firewall and or anti-virus product and check if Mediadent launches normaly. Please contact your **dealer** for the correct firewall and anti-virus configuration.

6. If you have checked this, it is also possible that the key no longer supports the version of Mediadent you are trying to run. Please **contact** your dealer for more information about Mediadent upgrades.

7 Mediadent Setup

7.1 Overview Mediadent Setup

These articles explain the different **configuration** options in Mediadent. This is an **advanced** topic and changes might effect the behavior of Mediadent.

If you have any questions or remarks, please don't hesitate to **contact us**. Read the article **Getting support (Section 10)** for more information.

1. **General Settings (Section 7.2)**
2. **Regional Registration Settings (Section 7.3)**
3. **Display Settings (Section 7.4)**
4. **Misc setting and maintenance (Section 7.5)**
5. **Modules (Section 7.6)**

7.2 General Settings

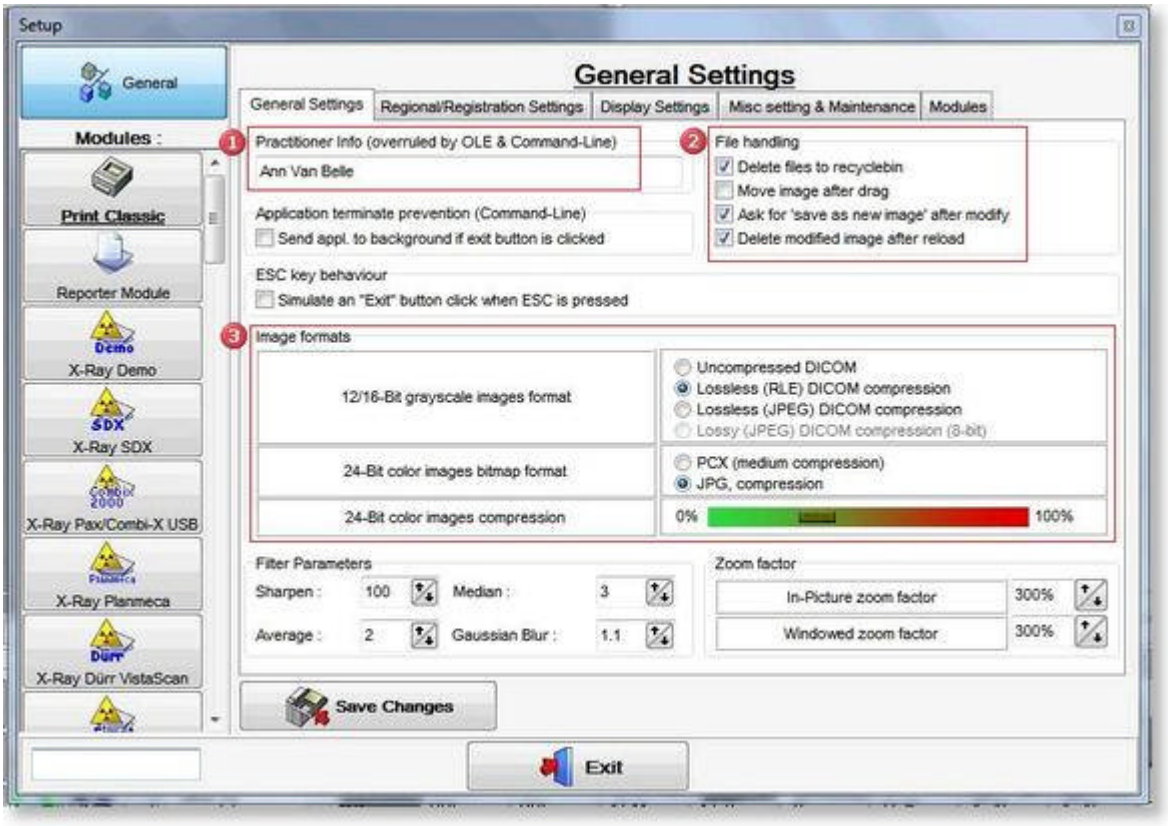
This **advanced section** will show a number of settings you can configure in Mediadent.

In the **General Settings**, you will be able to:

1 Change the **Practitioner info**

2 Determine how Mediadent will react in certain circumstances like deleting images, saving files etc... You can also avoid permanently **deleting** images

3 Indicate how Mediadent has to handle the **images format**



1. How to change the Practitioners Info

If you have a practice with a number of dentists it can be practical to show the **name of the dentist** in the status bar.

There are 2 ways to change the name of the practitioner:

1. Change the name in ***Mediadent Setup>General Settings.***

2. Change the name in your **Patient Management System**. The vendor of the Patient management system will be able to help you integrate the practitioner's name into Mediadent.

The changes made in your Patient Management System will **overrule** the settings in Mediadent Setup.

Follow these steps to change the **Practitioner's name in Mediadent**.

Action
1. Go to **Mediadent Setup>General Settings** 2. Fill in the **practitioners** name in the field Practitioner Info (overruled by OLE & Command-Line)

3. ***Save the changes***
4. ***Exit***

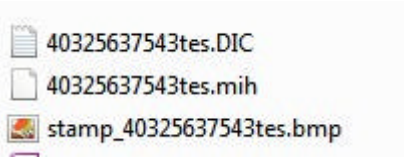
2. How to avoid deleting files permanently

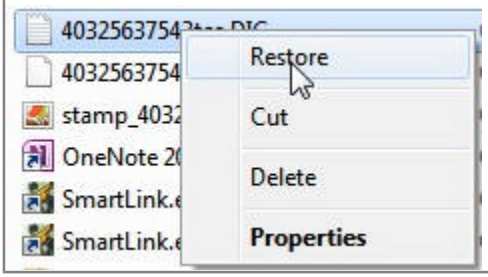
1. To avoid from permanently deleting files from the hard disk, follow these steps.

Action
1. Go to ***Options>Setup***
2. In the **General Settings tab** : Select the option **'Delete files to recyclebin'**.
If this is checked, you will always be able to retrieve the images from the **recycle bin**.

⚠ You only have to do this **once**. This setting will be retained in Mediadent.
This will only work on that particular PC. It will **not work** in a network configuration.

2. **Retrieving** images from the recycle bin

Action	**Explanation**
1. Double click on the **recycle bin** of Windows to open it	Open the recycle bin in Windows.
	Look for the **image** files of mediadent. The **image file** consists of 3 files : **.DIC file** **.mih file** **.bmp file** You have to **restore** these 3 files.
Select the first file and click with the ***RIGHT*** mouse button on the file. A menu will appear and select ***Restore*** or choose ***Restore this item*** in	

the menu. 	**Repeat** this for the 3 files.

The images should be taken by the workstation where the recycle bin resides. This will **not** work in a network environment when the server acts as a storage for the images.

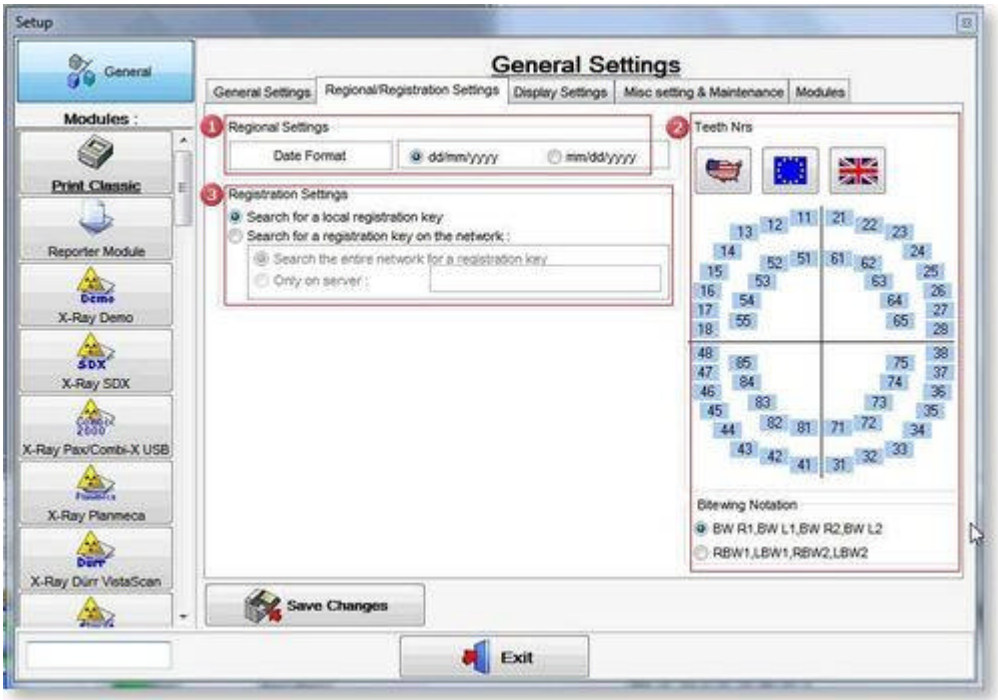
For more information about these settings, contact our Help desk.

7.3 Regional Registration Settings

In this **advanced section** we will explain the options in the Regional Registration Settings of the Mediadent Setup.

On this tab you will be able to configure the following options:

1. The **date format**: You can choose between European and American date format
2. **Teeth Numbers**: You can configure the teeth numbers depending on the standard in your country.
3. **Registration Settings**: If you have questions about this topic, please contact our Helpdesk. For instructions, read **Getting support (Section 10)**.



⚠ Always ***Save Changes*** before exiting the dialog box or your changes will not take effect.

For more information about these settings, contact our Helpdesk.

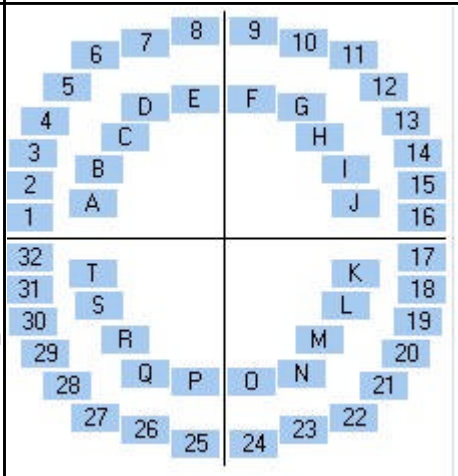
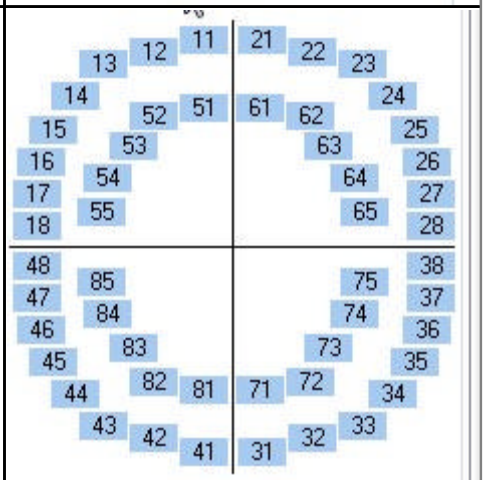
How to change the teeth numbering

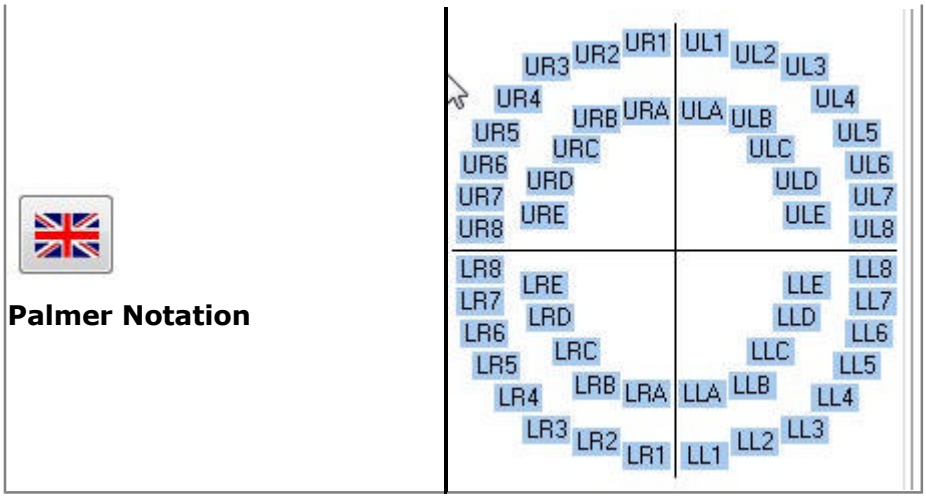
You have the possibility to change the teeth numbering.

There are **3 possibilities**:

- Universal Numbering system
- FDI Two-Digit Notation
- Palmer Notation

To change the teeth numbering, ***click*** on the corresponding **icons**

Icon	Result
Universal Numbering System	
FDI Two-Digit Notation	



Always ***Save Changes*** before exiting the dialog box or your changes will not take effect.

7.4 Display Settings

In this **advanced top** we will explain several settings that can be configured to help you find images based on keywords and extra information you can associate with your images.

In the ***Mediadent Setup> Display settings*** you have the possibility to configure the following things:

1. Define the **Image Properties Settings** like the 'User' fields, 'Grade' fields, 'Type' fields.

   Read the article '**Overview of the specific Extra Info and Keywords (Section 3.5.2)**' to understand how they can be used.

2. Define the **Image Library Settings** like the default folders Mediadent will create in the Image Library (for example DFO, Video, ...).

3. Define the **Viewport Settings** like showing a grid or a ruler on callibrated images.

To activate the Setup, choose ***Options>Setup*** and choose the tab **Display Settings.**

1. Define the Image Properties Settings

In the **Image Properties Settings** you will configure the fields you can use to filter on.

In the article **Overview of the specific Extra Info and Keywords (Section 3.5.2)** you will learn how to select extra info and keywords. In this article we will explain how to create the lists with keywords you can choose from.

There are 2 tabs where you can enter extra fields:

- **Extra Info**: Info field, User field, Grade field, Type field

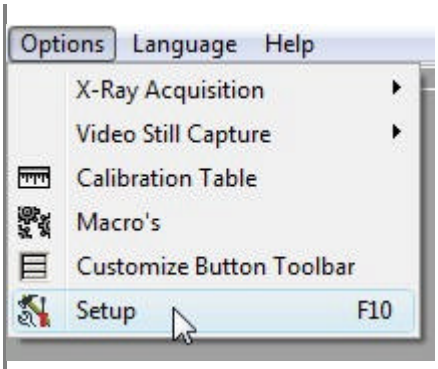
- **Keywords**: User defined keywords. These keywords you can choose yourself.

1.1 Extra Info

You have the possibilty to add **Extra Info fields** to your images. These fields are linked to your images and can be used to filter on. Adding the fields in the Display Settings will make them available in the Image Properties.

In this example we will show how to add **2 names** to the "User" Field File. Once they are created, they are available through the **properties** of the image and when **saving** an image.

Action	Explanation
Step 1. In the Mediadent menu, choose ***Options>Setup*** and choose the tab **'Display Settings'**	

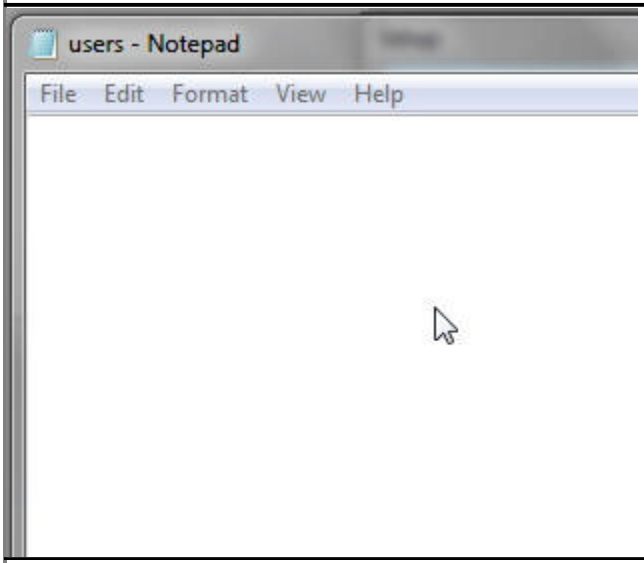


These are the different fields you can configure.

Step 2. Click on the **icon** next to **<APPLDIR>\users.txt.**

In the example we want to add 2 Users, so we can choose between the 2 users in the Image Properties.

On the tab **'Image Properties Settings'**, click on the icon to change the **"User " Field File**.



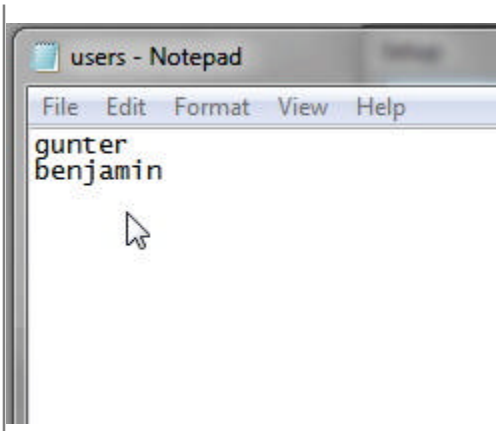
This will open the Notepad.

In the Notepad you will be able to type a list of users.

Changing the grade, image types and comments are also done via Notepad.

Step 3. Type the names in Notepad

Type in the **names** of

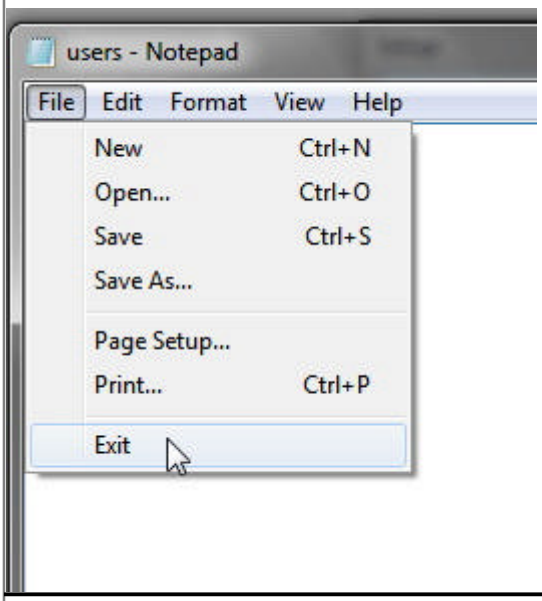


the Users.

In this example the users are gunter and benjamin. Type in the first name and enter, then type in the second name.

Step 4. Choose ***File>Save***

Step 5. Choose ***File>Exit***



After typing the names, don't forget to save the Notepad file.

Step 6. Choose ***Save Changes*** in the Mediadent setup screen.

Step 7. **Exit** the Mediadent setup screen

Back in Mediadent Setup screen, you still have to save the changes in Mediadent.

⚠ You need to **close Mediadent** and restart the program to have your changes take effect

Next step Box To **test** the changes made, select an image and change the properties. Read the article **Overview of the image properties (Section 3.5.1)**.

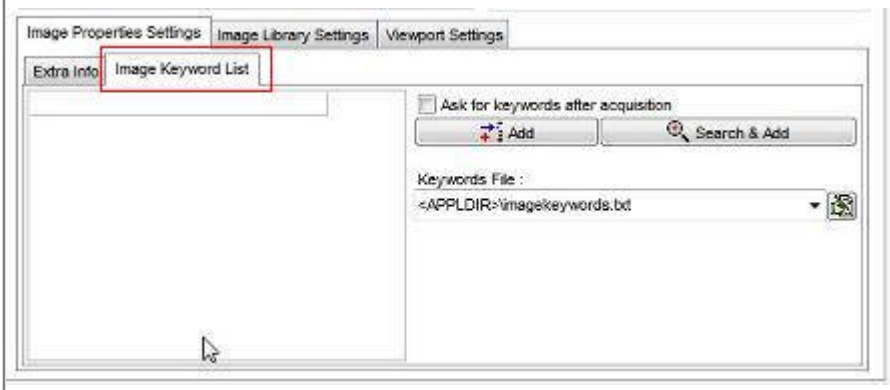
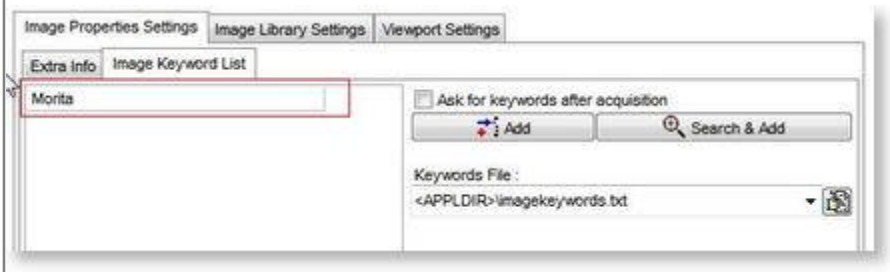
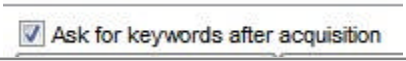
Changing the **Grade, Image Type and Comments** is done in the same way. You can repeat a number of steps as explained above.

Action	Explanation
To change the **Comments** field	
Repeat **Step 1.**	Go to Step 1. in the previous explanation.
2. Click on the **icon** next to **<APPLDIR>\comments.txt.**	This will allow you to add standard comments
3. Type the **comments** in Notepad	.
Repeat Step 4. to Step 7.	Go to Step 4. in the previous explanation and repeat the steps until Step 7.
To change the **Grade** field	
Repeat **Step 1.**	Go to Step 1. in the previous explanation.
2. Click on the icon next to **<APPLDIR>\imagegrades.txt.**	This will allow you to change the Grades. By default you have Grade A,B and C.
3. Type the **grades** in Notepad	.
Repeat Step 4. to Step 7.	Go to Step 4. in the previous explanation and repeat the steps until Step 7.
To change the **Image Type**	
Repeat **Step 1.**	Go to Step 1. in the previous explanation.
2. Click on the icon next to **<APPLDIR>\imagetypes.txt.**	This will allow you to change the image type field. You can change the list of the image types in the Notepad screen.
3. Type the **different image types** in Notepad	.
Repeat Step 4. to Step 7.	Go to Step 4. in the previous explanation and repeat the steps until Step 7.

1.2. Image Keyword List

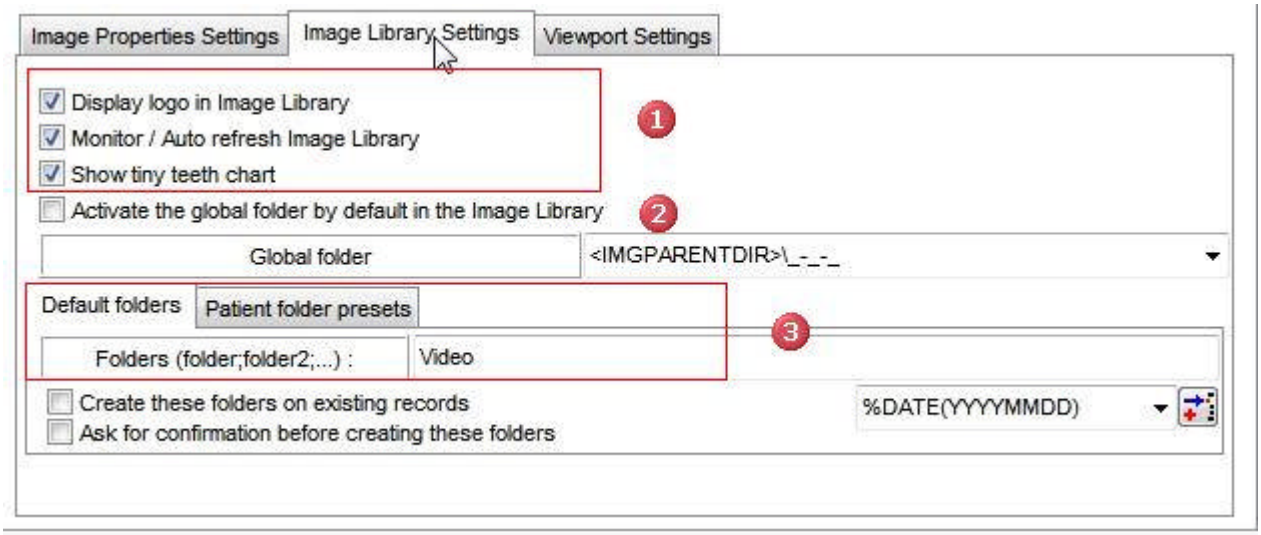
These are the **user defined** keywords you can define yourself. These fields will become available in the **properties** of the image and when you **save** an image.

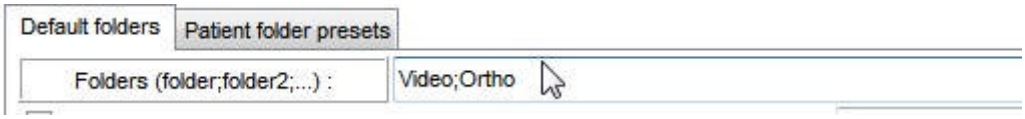
Action	Explanantion

Go to the **Setup of Mediadent: Display Settngs** as previously described	
 Choose the ***'Image Keyword List'*** tab	On the tab **'Image Keyword List'** you can add your own keywords.
 ***Type*** in the keyword.	In this example, the keyword **'Morita'** was typed in.
Click on the ***'Add'*** button.	You are ready to type in a second keyword if necessary.
 Click on ***'Save Changes'***.	Always **Save** the changes before existing the dialogbox.
 Click on ***'Exit'***.	To test, select an image in the image library and change the image properties. You will have the possibility to add the new defined keyword.
You have the possibility to ask for keywords everytime you make an acquisition. Check the option **'Ask for keywords after acquisition'**. 	.

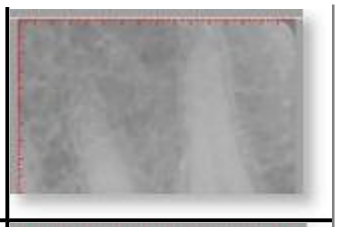
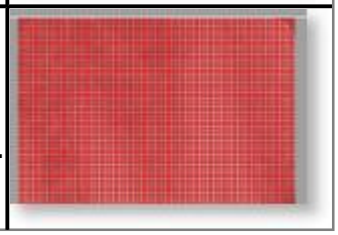
2. Image Library Settings

The Image Library Settings will allow you to change the **layout** of the Image Library. Via these options your will also be able to set **default folders** that are created every time we add a new patient.

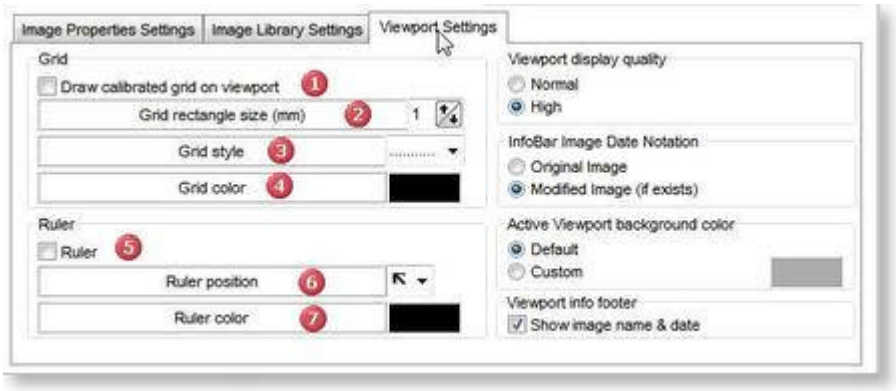


1	Display logo in Image Library: Untick this option if you don't want to see the Mediadent logo. Monitor/Auto refresh Image Library: This option will automatically update the Image Library when new images are added. Show tiny teeth chart: Untick this options if you don't want to see the teeth chart in the Image Library.
2	When you tick the option **'Activate the global folder by default in the Image Library'** means that when opening a patient's library, the global folder will always be visible. To understand what the global folder can do, read the article **The global and patient library (Section 9.4)** and **How to move images from one patient to another (Section 4.3.1)**.
3	By default you can determine which folders are created in the patient's library. To add a default folder, type the name of the folder in the box.  In this screenshot you will see **2 default folders** that will be created: **Video and Ortho.** These are the folders that are created for every new patients. The option: **'Create these folders on existing records'** will create the two folders (in the example Video and Ortho) for all the existing patients in Mediadent.

3. Viewport Settings

Ruler The ruler in this picture is set to RED for clarity.	
Grid The grid in this picture is set to RED and 1mm for clarity.	

This is the dialog box to configure the **Viewport Settings**:



In this dialog box, you can select the tab **Viewport Settings** and change the default settings for the **Grid** and **scale**.

1	When this option is checked the grid will **automatically** be visible in the Viewport.
2	You can change the **size** of the Grid rectangle for better analysis.
3	The Grid **style** is also something that can be configured.
4	Changing the **color** can help to visualize the grid on your image.
5	If you want the **ruler** to be visible in your Viewport, check this option.
6	You can choose the **position** of the ruler: the left top, right top, left bottom, right bottom.
7	Of course the **color** can be changed for better visibility.

7.5 Misc setting and maintenance

This tab is reserved for technical personnel.

For more information read the article **Getting support (Section 10)**.

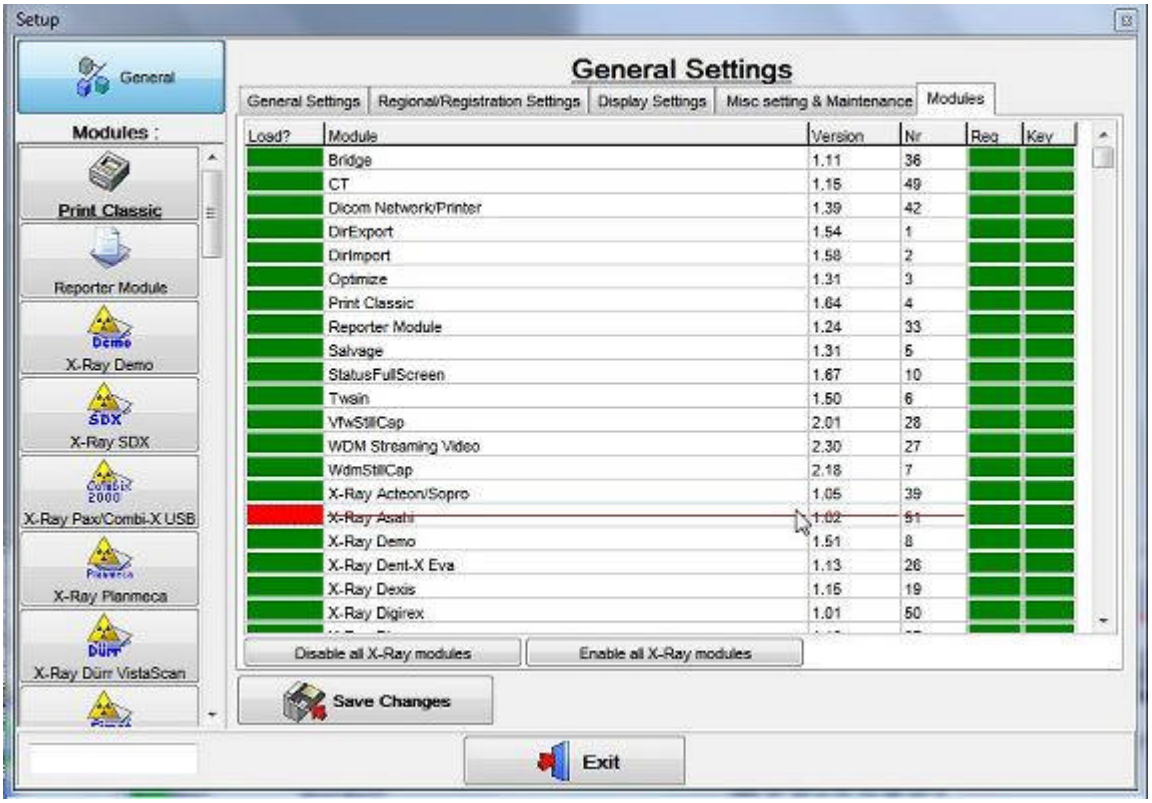
7.6 Modules

This tab shows the **different modules** that are loaded in Mediadent.

A module is a small program that gets loaded when you launch Mediadent and this small program makes sure that Mediadent can work with your acquisition device.

For example the Module 'X-Ray Dexis' will make sure that Mediadent can work with the Dexis acquisition device.

If the color is **green** it means the module is loaded and can be used in Mediadent.



When Mediadent **launches** the activated modules are loaded.

If you want **Mediadent to launch quicker**, you can disable some of the X-Ray modules you are not using.

To **unload** a module, click on the **green** box. A red strike-through line will appear over de module, indicating that the module will not be loaded.

WDM Streaming Video 2.30 27
WdmStillCap 2.18 7
X-Ray Acteon/Sopro 1.05 39
X-Ray Asahi 1.02 51
X-Ray Demo 1.51 8
X-Ray Dent-X Eva 1.13 26
X-Ray Dexis 1.15 19

Be aware that you do not de-activate **your** acquisition device!

If you are not sure about this setting, please contact us. Read the instructions on how to get support: **Getting support (Section 10)**.

8 Mediadent Module Setup

8.1 The optimize module

Changing the Optimization profile is one of the advanced features in Mediadent.

You can create an optimization profile that will **automatically** perform certain actions that will enhance your image.

In the optimization profile you can perform following actions to enhance the image:

- Flip vertical
- Flip Horizontal
- Rotate
- Invert
- Apply Unsharp Mask, Gamma, Glaussian Blur, ...
- Stretch Intensity
- Histo Equaliz
- ....

These settings can be saved in an optimization profile and applied to your images.

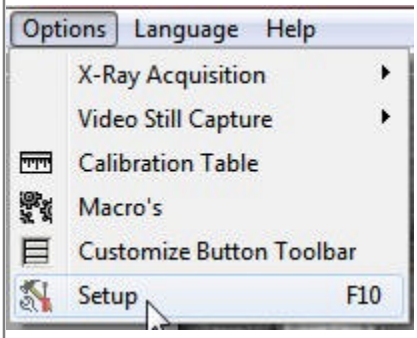
Applying an **optimization profile**, can be done in 2 ways.

1. The optimization profile gets applied **automatically** when an acquisition is made with an particular acquisition device.

2. The optimization profile get applied **manually**. Read the article **Working with the optimize feature (Section 3.2.8)**.

In this advanced article you will learn how to **modify** an optimization profile and how you can **assign** an optimization profile to an acquisition device so it the optimization profile gets applied automatically (point 1.)

1. Modify an Optimization profile

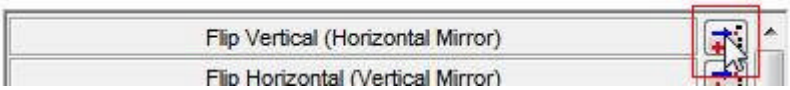
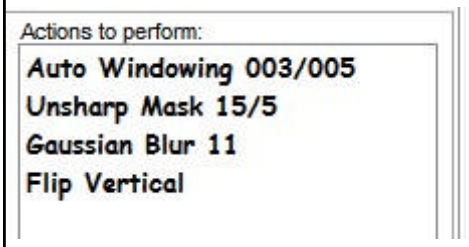
Action	***Explanation***
In the Mediadent menu, choose ***Options>Setup*** 	Scroll down in the Mediadent Set up until you find the Optimize module.

Overview of the optimization screen

1	These different **filters** you can save to the Optimization profile.
2	You can **scroll down** in the list and find more or less the same options as the Filter options.
3	The list the **filtering actions** that need to be performed for this particular Optimization profile.
4	Will delete a **particular action** in the list. Select the particular action first.
5	This will **clear all the filtering actions** for this particular Optimization profile.
6	**Description** of the Optimization profile
7	Each tab represents an Optimization profile. You can configure up to **5 Optimization profiles**. Each Optimization profile contains a list of filtering actions to perform.
8	Before existing this screen, always **Save changes** (this is NOT done automatically).

9	By **default** a number of Optimization profiles are already available. You can change the Optimization profiles, if you are not happy, you can **revert** back to the default settings, by using this button.
10	The Appearance tab is used to **link** a particular Optimization profile to an acquisition device. This will be explained later.

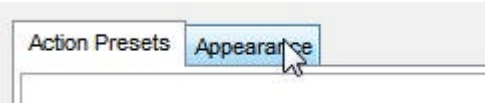
Example**: We will modify Optimize 1 and add the **action Flip Vertical

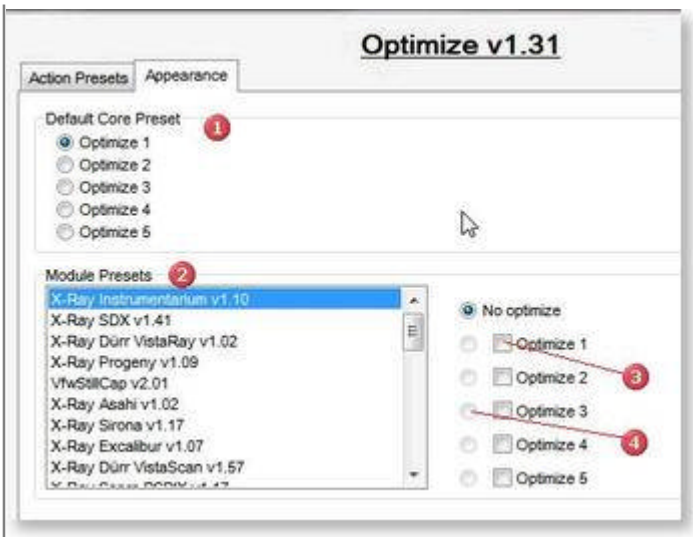
1. Go to the Optimize module in the Mediadent Setup	.
2. Click on the icon next to the **Flip Vertical action** 	You will notice that the Flip Vertical action is added to the **list of actions** to be performed.  Everytime you click on the **Optimize 1** button in the iconset these actions will be performed to the selected image in the Viewport.
3. ***Save Changes*** 	Always Save Changes before exiting the setup screen.

2. Assign an Optimization profile to an acquisition device

The **Appearance** tab is used to link a particular Optimization profile to an acquisition device.

For example: If, for your device the image always has to be flipped horizontal, then you can make an Optimize profile for this and assign it to that particular acquisition device.





1	Default Core Preset. This is the Optimization that is default available.
2	This is the **list of acquisition devices** you can assign an Optimization profile to. The action list that is defined in the profile will be executed.
3	To **link** the Optimization profile to the device, check this **box**.
4	To **activate** the Optimization profile to the device, check the **radiobutton**.

To assign an Optimization profile to the device, you have to check the box **AND** check the radiobutton.

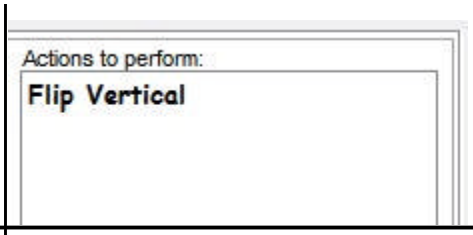
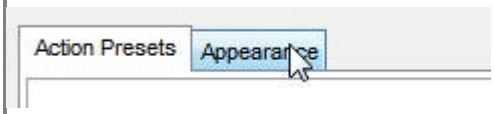
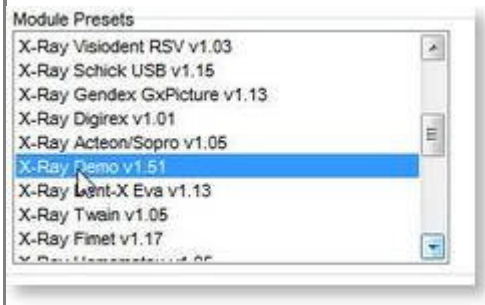
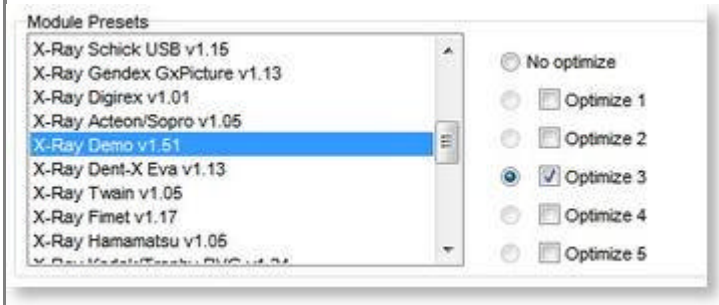
3. Example: Change Optimize 3 and link to Demo sensor

As an example we will do the 2 steps. First you need to determine the action list and then you need to assign a device to this action list.

Let's change the **Optimization profile 3** and link it to the **Demo sensor**.

We would like to **flip the image vertically** every time we acquire an image when using the Demo sensor.

Action	Explanation
Step 1: Configure the action list	
1. Click on the Optimize 3 tab	First we will configure the action list for the Optimize 3 profile.
2. **Remove** all the actions from the Optimization profile 3, by pressing the Clear button	We will remove all the actions that are default.
	The action will appear in the list.

3. Add the **Flip Vertical** action by clicking on the icon	
4. **Save** the changes	We will save the Optimize 3 action list.
Step 2: Link the optimization profile to the Demo sensor	
1. Go to the **Appearance** tab. 	Linking the Optimize 3 profile to an acquisition device is done via the 'Appearance' tab.
2. Choose the **Demo Sensor** in the list of Module Presets. 	Select the acquisition device in the list.
3. Select Optimization profile 3 by checking the **Optimize 3** 4. **Activate** the Optimize 3 by checking the radiobutton 	Check the Optimize 3 box to link the profile to the device. You also need to **activate** it, this is done by checking the radiobutton in front of the Optimize 3 profile.
5. ***Save changes*** – Yes to save the changes	You always need to Save before exiting the module, otherwise you settings will not be saved.

6. ***Exit*** 	Everytime you use this device the Optimize 3 action list will execute. In this case a Vertical Flip.

TThe optimization profile is also linked to the **filters** you can apply to your image. All the settings in the filter can be saved in an optimization profile and applied during acquisition.

9 General topics explained

9.1 A viewport

A **Viewport** is a region where you can load an **image** into for analysis purposes. Loading an image can be done by first **activating** the Viewport. To activate a Viewport you have to select it by clicking in the region with your left mouse button. Once the Viewport is activated you will see that it changes color (dark grey). Now you can **double click** on an image in the Image Library and it will be loaded into the Viewport.

9.2 A desktop

A **Desktop** is the way in which the **different screen elements** like Viewports, Icon set, Image Library, ... are presented on your screen.

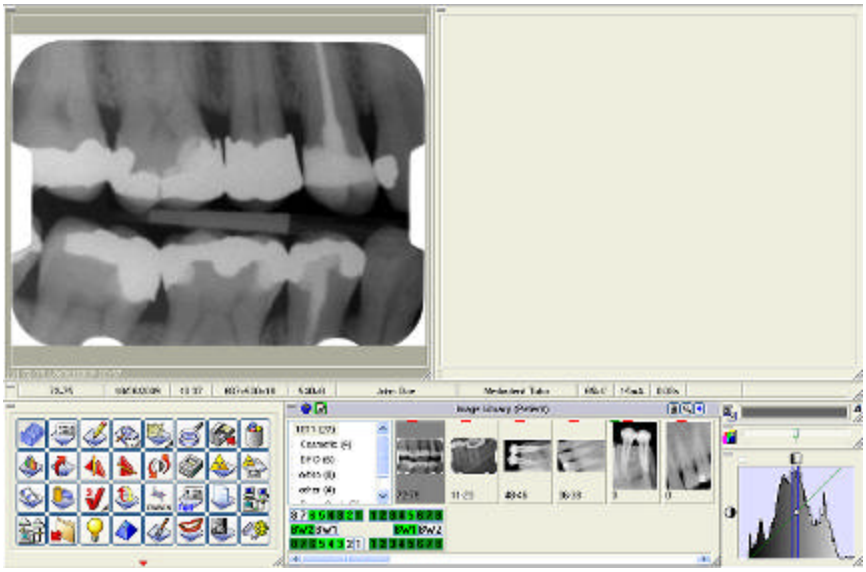
The Desktop will determine :

- How many **Viewports** A **Viewport** is a region where you can load an **image** into for analysis purposes. Loading an image can be done by first **activating** the Viewport. To activate a Viewport you have to select it by clicking in the region with your left mouse button. Once the Viewport is activated you will see that it changes color (dark grey). Now you can **double click** on the image and it will be loaded into the Viewport. are visible.
- What the position is of the Iconset.
- Where the Image library is positioned
- If and where the histogram is positioned
- If and where the brightness/contrast bar is positioned
- What screen resolution will be used

In short it determines the look of your Desktop within Mediadent.

Read more about the **different Desktop elements** in the topic about the **screen elements (Section 2.1)**.

Example of one of the standard Mediadent Desktops :



Important to understand is that the Desktop is also tied to the **resolution** of your screen. When changing the screen or screen resolution it may be necessary to load another Desktop or to create your own Desktop.

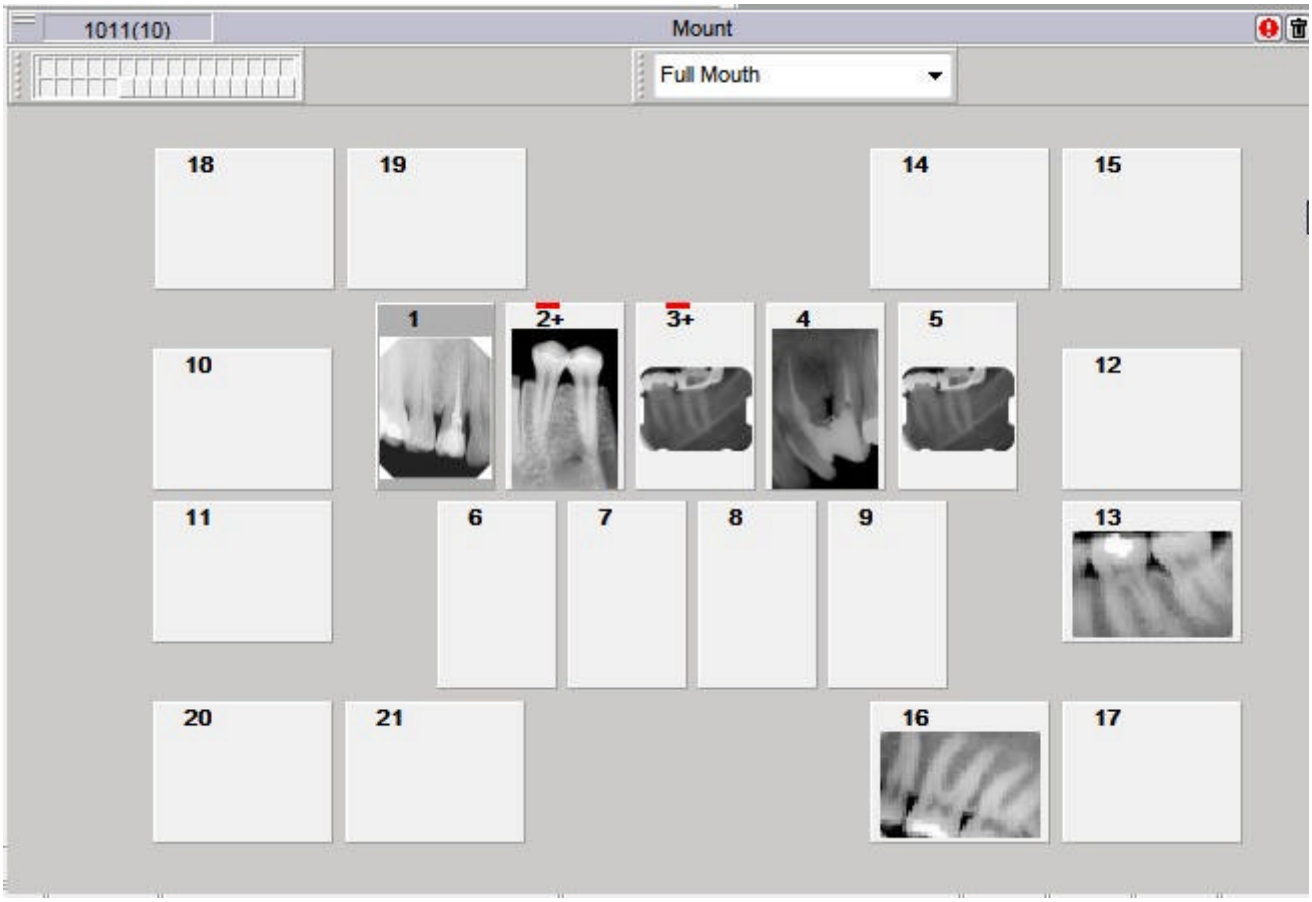
9.3 A status mount

In this topic we will explain the basics of an alternative way of working with your images.

The **Status Mount** is together with the **Image Library** a way to **organize** your images.

The images can be stored, modified or deleted in the Status Mount or the Image Library.

You can also use the Status Mount in **acquisition** mode. The images will be captured in the boxes.



Differences between the Image Library and the Status Mount

The **Image Library** is the main container where the images are stored in. The manipulations you do on the images in the Image Library are **permanent**. This means deleting an image in the Image Library will also result in the deletion of the image in the Status Mount. Removing an image from the Status Mount will not result in the deletion of the image.

Working with a Status Mount has a couple of **advantages:**

- You have the possibility to **automate** the image taking process. In some offices there is a

procedure in place for taking pictures. For example in some cases it is common practice to take images of the full mouth. In that case it is very handy to be able to automate this.

- Another advantage of using the Status Mount is that you can automatically **associate** the tooth or teeth to the image. The name of the image will represent the tooth or teeth association.
- Also the **order** in which the pictures are taken can be determined in the Status Mount.
- If you take intra-oral images it is also possible to change the **orientation** (rotate 90° or flip horizontally or vertically) of the image in the Status Mount Box independent of the original image.

An example of a Status Mount scheme is the **AAO**. This scheme is used by the **American Academy of Orthodontists**.

If you want to know how you can **move images** from the Image library into the Status Mount, read the article : **Working with the Status Mount and the Image Library (Section 3.4.1)**.

Perhaps you want to **use** the Status Mount when you are acquiring an image, read the article : **Using the Status Mount in Acquisition Mode (Section 3.4.2)**.

Maybe you want to **create** your own Status Mount, read the How to article : **How to create a Status Mount (Section 4.5.1)**.

9.4 The global and patient library

Global Image Library

The Global Image Library is a **library** which is accessible from **every patient's library**.

It can be used to store images for demonstration purposes or as a **temporary storage** for images you want to move from one patient's library to another.

The **icon** for the **Global Image Library** can be found in the Image Library :

Click on the Global Image Library icon to see the images that are stored in this Library.

Patient Image Library

The Patient Image Library is the folder you will store the images taken for that **specific patient**. You have the ability to structure the Patient's Library in any way that is suited for you.

You will be able to create **subfolders** in the Patient's library.

The **icon** for the **Patient Library** can be found in the Image Library :

Clicking on the icon will show the images in the Patient's Image Library.

Learn more about using the Patient's Library in the topic **'Working with the Image library' (Section 3.5.3)**.

You can use the Global Image Library if you want to move or copy an image from one patient's library to another. See the topic **'How to move images from one patient to another'. (Section 4.3.1)**

9.5 How does the histogram work?

An **image histogram** is a type of histogram which acts as a graphical representation of the **tonal distribution** in a digital image. It plots the **number of pixels** for each tonal value. By looking at the histogram for a specific image a viewer will be able to judge the entire tonal distribution at a glance.

The **horizontal axis** of the graph represents the tonal variations, while the **vertical axis** represents the number of pixels in that particular tone.

The horizontal axis:

The **left side** of the horizontal axis represents the **black and dark areas**, the **middle** represents medium **grey** and the **right hand side** represents **light and pure white** areas.

The vertical axis:

The vertical axis represents the **size of the area** that is captured in each one of these zones.

Thus, the histogram for a **very bright image** with few dark areas and/or shadows will have most of its data points on the **right side and center of the graph**.

Conversely, the histogram for a **very dark image** will have the majority of its data points on the **left side and center of the graph**.

Mediadent and the histogram

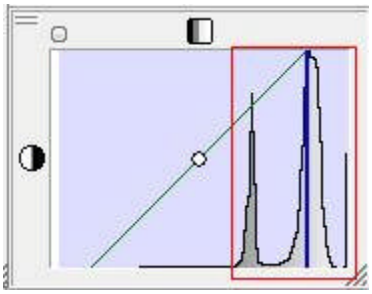


Image editors, like Mediadent, typically have provisions to create a histogram of the image being edited.

The histogram plots the number of pixels in the image (vertical axis) with a particular brightness value (horizontal axis).

Algorithms in the digital editor (Mediadent) allow the user to visually **adjust the brightness value** of each pixel and to dynamically display the results as adjustments are made.

Improvements in picture **brightness and contrast** can thus be obtained.

In the article **Working with windowing (Section 3.2.2)** you will learn how to use the histogram in Mediadent.

(Source: Wikipedia)

10 Getting support

If you have any **additional questions** concerning Mediadent, you can contact the organisation you bought Mediadent from (your dealer).

In case of **technical issues**, be prepared:

1. When you are experiencing technical problems be sure to have the following **materials** at hand:

- Mediadent installation CD

- Installation CDs of your acquisition device

2. The **questions** you can expect to be asked are the following:

- What are the circumstances in which the problem occurs?

- What is the version of Mediadent running on the PC?

- What is the operating system running on the PC?

...

To help you better, provide as much background information as possible.

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